

VISIT...

LANZAROTE
Caliente.COM

Burial and ancient society

The rise of the Greek
city-state



Burial and ancient society

NEW STUDIES IN ARCHAEOLOGY

Series editors

Colin Renfrew, *University of Cambridge*

Jeremy Sabloff, *University of Pittsburgh*

Other titles in the series

Ian Hodder and Clive Orton: *Spatial Analysis in Archaeology*

Kenneth Hudson: *World Industrial Archaeology*

Keith Muckelroy: *Maritime Archaeology*

Graham Connah: *Three Thousand Years in Africa*

Richard E. Blanton, Stephen A. Kowalewski, Gary Feinman and Jill Appel:

Ancient Mesoamerica

Stephen Plog: *Stylistic Variation in Prehistoric Ceramics*

Peter Wells: *Culture Contact and Culture Change*

Ian Hodder: *Symbols in Action*

Patrick Vinton Kirch: *Evolution of the Polynesian Chiefdoms*

Dean Arnold: *Ceramic Theory and Cultural Process*

Geoffrey W. Conrad and Arthur A. Demarest: *Religion and Empire:*

The Dynamics of Aztec and Inca Expansionism

Graeme Barker: *Prehistoric Farming in Europe*

Daniel Miller: *Artefacts as Categories*

Rosalind Hunter-Anderson: *Prehistoric Adaptation in the American Southwest*

Robin Torrence: *Production and Exchange of Stone Tools*

M. Shanks and C. Tilley: *Re-Constructing Archaeology*

Joseph A. Tainter: *The Collapse of Complex Societies*

Peter Bogucki: *Forest Farmers and Stock Herders*

Alisdair Whittle: *Problems in Neolithic Archaeology*

John Fox: *Maya Postclassic State Formation*

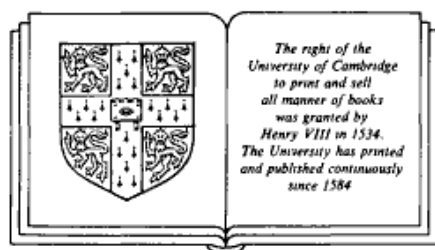
Bo Gräslund: *The Birth of Prehistoric Chronology*

Olivier de Montmollin: *The Archaeology of Political Structure*

IAN MORRIS *Fellow of Jesus College, Cambridge*

Burial and ancient society

The rise of the Greek city-state



Cambridge University Press

Cambridge

New York Port Chester Melbourne Sydney

Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
40 West 20th Street, New York, NY 10011, USA
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© Cambridge University Press 1987

First published 1987
First paperback edition 1989

Printed in Great Britain at the University Press, Cambridge

British Library cataloguing in publication data

Morris, Ian
Burial and ancient society:
the rise of the Greek city-state –
(New studies in archaeology)
1. Funeral rites and ceremonies, Ancient – Greece
393'.1'0938 GT3251

Library of Congress cataloguing in publication data

Morris, Ian, 1960–
Burial and ancient society.
(New studies in archaeology)
Bibliography.
Includes index.
1. Funeral rites and ceremonies – Greece.
2. Greece – Antiquities. 3. City-states – Greece.
4. Tombs – Greece. I. Title. II. Series.
DF101.M67 1987 938 86–32719

ISBN 0 521 32680 X hard covers
ISBN 0 521 38738 8 paperback

CONTENTS

List of figures and tables vi

Preface and acknowledgements viii

1 Introduction: the argument 1

Part 1

2 The living and the dead 29

3 The social dimensions of early Greek burial 44

Part 2

4 Demography and space 57

5 The burying groups 72

6 Exclusion and retrieval 97

7 Mortuary variability 110

8 Symbols and display 140

9 Pottery and population 156

Part 3

10 The rise of the polis 171

11 Conclusion 211

Appendix 1: Classification of Attic cemeteries by age structure 218

Appendix 2: List of sites analysed 222

Bibliography 234

Site index 256

General index 258

FIGURES AND TABLES

Figures

- 1 Early Iron Age graves in the Kerameikos cemetery at Athens *xii*
- 2 Sites mentioned in the text 4
- 3 Local pottery chronologies 12
- 4 Successive distributions of a hypothetical artefact-type population 15
- 5 A model of the process of emulation 16
- 6 Submycenaean cist graves 19
- 7 Trench-and-hole cremations 20
- 8 Kerameikos gr. VDAk 1 21
- 9 Archaic graves in the Kerameikos 22
- 10 The tripartite structure of the rite of passage 30
- 11 Hertz's model of the relationships between the actors in funerary rituals 31
- 12 A man's funeral on an Athenian Late Geometric vase 49
- 13 A funeral on an Athenian Red Figure loutrophoros 51
- 14 Mourning figure from the marker of Kerameikos gr. G 43 52
- 15 Grave lengths at Athens, 1100–500 BC 60
- 16 Classification of the Athenian cemeteries by age types 61
- 17 Cemeteries and settlement at Athens, Submycenaean to Late Geometric I 64
- 18 Cemeteries and settlement at Athens, Late Geometric II to Early Red Figure 66
- 19 Settlements and cemeteries in the Vari area 69
- 20 Settlement and cemeteries at Thorikos 70
- 21 Changing age structure and spatial organisation in the Attic cemeteries 71
- 22 Numbers of adult and child burials at Athens 73
- 23 Total numbers of burials per thirty-year generation for Athens, Attica and Argos 73
- 24 Anavyssos, Ag. Pandeleimon cemetery: Middle Geometric graves 80
- 25 Anavyssos, Ag. Pandeleimon cemetery: Late Geometric I graves 83
- 26 Anavyssos, Ag. Pandeleimon cemetery: Late Geometric II graves 84
- 27 Correlation of adult plot and cemetery sizes 89
- 28 An impression of the general parallel changes in adult plot and cemetery sizes in Attica 89
- 29 Changes in the membership of adult grave plots and cemeteries 95
- 30 Architectural remains at Lathouresa 98
- 31 Excavations of the Greek Archaeological Service at Athens 102
- 32 The relative visibility of burials 103
- 33 Intra-mural burials at Xeropolis, Lefkandi 107
- 34 Key diagram for the Kerameikos Pompeion cemetery in Zeitstufe 2b 113
- 35 Variability curve for Kerameikos Zeitstufe 2b 114
- 36 Kerameikos variability scores 116
- 37 The Kerameikos cemetery, Zeitstufen 1–2b 119
- 38 The Kerameikos cemetery, Zeitstufen 3–5 121
- 39 The Kerameikos cemetery, Zeitstufen 6a–7 123

- 40 The Kerameikos cemetery, Zeitstufen 8–10 125
- 41 The Agora Late Geometric Tholos cemetery 126–7
- 42 Distribution of vases in Late Geometric adult graves at Anavyssos 129
- 43 The Kerameikos cemetery, Archaic phases 1–5 130
- 44 The Rundbau plot 132
- 45 The Kerameikos cemetery, Archaic phases 6–8 133
- 46 The Agora Archaic cemetery 135
- 47 Sections through the Vari East cemetery and Kerameikos mounds A–H 137
- 48 Lorenz curves for Athenian adult graves 142
- 49 Distribution of vases and metal in Athenian Late Geometric I and II graves 143
- 50 Relative entropy scores for the Kerameikos adult burials 144
- 51 The eighth/seventh century settlement of Koukounaries on Paros 147
- 52 Distribution of metalwork and vases in intact adult graves at Athens 149
- 53 Proportions of intact adult burials at Athens with and without metal goods 150
- 54 Numbers of sites in Attica, Corinthia and the Argive plain, 900–500 BC 157
- 55 Eighth/seventh century house at Koukounaries 164
- 56 Schematic representation of the transition from the pre-polis structure to the polis structure 176
- 57 The distribution of grave goods at Lefkandi 181
- 58 The sanctuary of Athena at Koukounaries 190
- 59 The earliest warrior scene in Greek Geometric art 197
- 60 Sites in Attica 223
- 61 Sites in Athens 229
- 62 The Kerameikos cemeteries 232

Tables

- 1 The periodisation of Attic pottery styles 11
- 2 Krause's Kerameikos chronology 19
- 3 Ratios of grave length to skeleton length 59
- 4 Ages of analysed urn cremations 61
- 5 Adult burying group sizes of cemeteries 77
- 6 Sizes of adult groups contributing to excavated cemeteries and grave plots 88
- 7 The measurement of variability: Kerameikos Zeitstufe 2b 115
- 8 Variability scores, Attic adult cemeteries 118
- 9 Mean numbers of artefacts per intact adult burial at Athens 141
- 10 Gini's coefficient of inequality for intact adult burials at Athens 143
- 11 Intact adult male graves with arms or armour in the Kerameikos 151
- 12 Results of intensive surveys in Greece 159
- 13 Population growth in Italy and the Near East in the eighth to fourth centuries BC 159
- 14 Numbers of burials in the Fortetsa cemetery at Knossos 180
- 15 Grave goods per intact adult burial, 1050–750 BC: Athens, Lefkandi, Argos 182
- 16 Adult and sub-adult graves at Argos, 900–700 BC 185
- 17 Mean contents of burials in the Corinth North Cemetery, 770–720 BC 186
- 18 Numbers of burials at Rhitsona in Boeotia 189
- 19 Increasing dedications at Greek sanctuaries, c.1100–600 BC 191

PREFACE AND ACKNOWLEDGEMENTS

This study is based on research carried out between 1981 and 1985, first at Birmingham University under the supervision of Professor Richard Tomlinson, and later at Cambridge University, under the supervision of Professor Anthony Snodgrass. In organising it as a book, I have tried to eliminate as much as possible of the pedantry of the doctoral thesis, while still conveying an impression of the great wealth of data which is the hallmark of Classical archaeology. The result, I hope, will contribute to the growth of the archaeological component in Greek history and of the theoretical component in Classical archaeology, as well as drawing prehistorians' attention to the importance and potential of Mediterranean archaeology.

I have many people to thank. As well as Professors Snodgrass and Tomlinson, I am indebted to Paul Cartledge, Bill Cavanagh, John Cherry, Tom Gallant, Peter Garnsey, Paul Halstead, Robin Osborne and Colin Renfrew for their invaluable help. All read and commented on this or earlier pieces of work; and Anthony Snodgrass, in particular, has tolerated and even encouraged my heresies with a patience worthy of Penelope. I must also thank Alexandra Coucouzeli, Cathy Morgan and James Whitley, whose Ph.D. projects helped to create such an atmosphere of interest in Dark Age Greece at Cambridge. Archaeologists based in Greece who have given me information about particular sites are mentioned in the text; but I must single out for special thanks the following: Dimitri Schilardi, for inviting me to his Koukounaries excavations each year since 1983, and for discussing the interpretation of the site; all those who have made these seasons on Paros so memorable; and Petros Themelis, for inviting me to his Eretria excavation in 1984, for granting me permit no.248 (20/5/83) of the Third Ephoreia for Classical Antiquities to study in connection with my thesis the pottery from the 1973 Anavyssos excavation, stored in Vravra Museum, and for discussing with me the interpretation of the Ag. Pandeleimon cemetery.

I owe a particular debt to Kathy St John, for putting up with this research and with my delving into death; and to my parents, for supporting my inexplicable interests in the past since my first dig at the age of fourteen. This book is dedicated to Kathy and to them. Debts of another kind are owed to the various bodies which have funded my work – the Department of Education and Science, the British Academy, St John's College Cambridge, the Department of Health and Social Security, and Jesus College Cambridge.

This project would not have been possible without the meticulous excavations of the Kerameikos cemetery at Athens carried out for the German Archaeological Institute by Karl Kübler and his successors. Their extensive explorations have been published in

many separate places since the 1930s; in order to distinguish between the various groups of graves, I use the following system of prefixes (see fig. 62):

- SM: the Pompeion Submycenaean cemetery, published by W. Kraiker in *Kerameikos I* (1939)
- PG: the Ag. Triada and Pompeion Protogeometric cemeteries, published by K. Kübler in *Kerameikos I* and IV (1939–43)
- G: the Ag. Triada and Eridanos North Bank Geometric cemeteries, published by K. Kübler in *Kerameikos V.1* (1954)
- hS: the Sacred Way graves, published by K. Vierneisel in *Arkhaiologikon Deltion* 18:2 (1963) 29–30; 19:2 (1964) 38–42; *Archäologischer Anzeiger* 1964, 420–67; and by B. Schlörb-Vierneisel and U. Knigge, in *Athenische Mitteilungen* 81 (1966) 1–134
- A: the Ag. Triada and Eridanos North Bank graves of the seventh and early sixth centuries published by K. Kübler in *Kerameikos VI.1* and *VI.2* (1959–70)
- C: the Ag. Triada graves of the sixth and fifth centuries published by K. Kübler in *Kerameikos VII.1* (1976)
- VDa: the graves under the Demosion Sema published by B. von Freytag gen. Löringhoff in *Athenische Mitteilungen* 89 (1974) 1–25
- LZB: the Archaic grave in the Ag. Triada cemetery published by B. von Freytag gen. Löringhoff in *Athenische Mitteilungen* 90 (1975) 76–81
- VEck: the ‘Eckterrasse’ graves published by B. von Freytag gen. Löringhoff in *Athenische Mitteilungen* 91 (1976) 31–61
- HW/SW: the South Mound graves published by U. Knigge in *Kerameikos IX* (1976)
- Rb: the Rundbau graves published by U. Knigge in *Kerameikos XII* (1980)
- Bau Z: the Bau Zeta graves published by U. Knigge in *Archäologischer Anzeiger* 1983, 221; 1984, 27–35

The Kerameikos excavations are continuing, under the direction of Ursula Knigge, and we may expect further important discoveries which may radically alter our perceptions of early Athens.

I would like to thank Peter Richards and Caroline Murray of the Cambridge University Press for their care and advice in the preparation of this book, and the following for their permission to reproduce photographs: German Archaeological Institute at Athens: figs. 1, 6, 8, 9; the National Museum of Athens: cover photograph, figs. 12, 13; David Connelly and Dimitri Schilardi: figs. 55, 58.

Shikokho, Kenya
September 1986

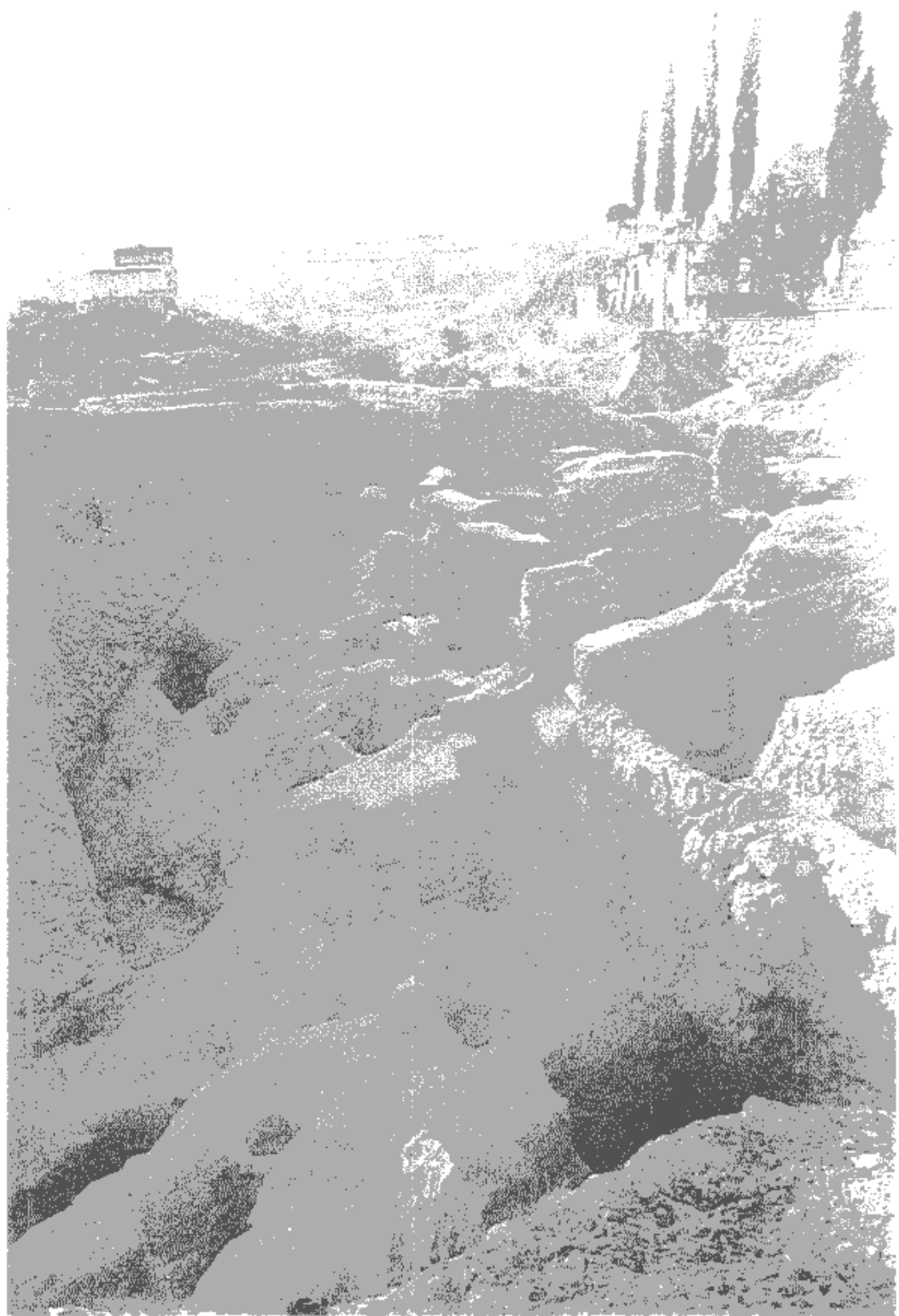


Fig.1 Early Iron Age graves in the Kerameikos cemetery at Athens (Kübler 1943, pl.1; German Archaeological Institute at Athens, Neg. Nr. Ker. 4557)

Introduction: the argument

This book is about the rise of the Greek city-state, one of the most remarkable social formations in history. The city-state, what the Greeks called the polis, was the world's first political community; it was also the first true slave society, and within it the concept of the freedom of the citizen was first articulated. Using a combination of archaeological and literary evidence, I will argue that this uniquely important state form appeared in the eighth century BC, as a result of intense struggle within communities which were already highly stratified.

Most archaeological studies of the early state deal with general rather than specific evolution (see Sahlins 1960), and above all with the 'Big Question' of the origin of those few pristine states which emerged without the influence of more advanced neighbours. However, ancient Greece never belonged to this exclusive club. In the period covered by this book, roughly 1100 to 500 BC, the Greeks were usually in contact with state and even imperial civilisations in the Near East and North Africa, and the emergence of the state in the Aegean was a secondary process. The most interesting question to address is not so much how state institutions appeared in Greece, as why they took on the particular and historically decisive forms of the polis. In attempting to answer this question, I will make a detailed study of the burial evidence from one region, analysing it as part of the ritual expressions of the structure of the community.

Although the quest for regularities in state formation processes is very interesting, we can learn just as much from the particular study of exceptional cases; as Trigger puts it, 'Nor is there any reason to believe that important generalisations may not emerge from the detailed contextual study (as by social anthropologists) of the structural and functional significance of the idiosyncratic details of specific ancient civilizations' (1985, 26). The polis was in its structure entirely different from any other ancient state form; through an understanding of the role of class antagonism and the function of slavery in the growth of this extreme society, we can perhaps hope to appreciate more fully the internal dynamics of other types of states. The pendulum of archaeological research interests is now swinging back towards the specific evolution of particular cultures (e.g. Flannery and Marcus (eds.) 1983, 1-4), and anthropologists are even coming to recognise the ways in which the rise of the polis contributes to our understanding of the transformations which have produced the modern West (e.g. Sahlins 1985, 32-4).

In this introductory chapter, I will outline those special features of the polis which we must try to account for. The bulk of the archaeological evidence available for this period is funerary; in part 1 an attempt will be made to sketch a general approach to burial and to show its particular relevance, before turning to a detailed study in part 2. The final

chapters integrate the burial evidence with the literary record and other classes of archaeological remains, to produce a model of the rise of the polis.

The polis was not the first state society in the Aegean: the brilliant Minoan–Mycenaean palatial civilisation had flourished during the second millennium BC, before its centres were engulfed by flames around 1200. Monumental architecture, syllabic writing and the redistributive state all disappeared, but the collapse of the palaces did not leave a *tabula rasa*; in Chapter 10 below we will see some of the ways in which later Greeks subtly reworked this heroic past for their own present ends, and one of the main arguments of this book will be that a considerable degree of social hierarchy survived the twelfth-century catastrophes. The period from 1200 to 750 BC is generally known as the ‘Dark Age’, and is often seen as a time of poverty, savagery and isolation, as in Starr’s apocalyptic vision: ‘During the Dark Ages . . . men struggled to survive and to hold together the tissue of society’ (1977, 47). A general demographic and material decline after 1200 BC seems certain, but Anglo-American archaeologists have tended to exaggerate its importance: Greek society was probably always much more sophisticated than contemporary Urnfield Europe.

Trying to identify the transition from a complex stratified society to an early state can often turn into a definitional blind alley (see Jones and Kautz 1981, 14–34; Carneiro 1981, 67–71), and many anthropologists feel that the origin of salient ranking is every bit as important as the origin of the state (e.g. Service 1975; Wright 1977). The Mycenaean prehistory of the polis meant that ranking was present throughout the Dark Age. Many of the archaeological features which Flannery (1972, 403–4) suggested as defining the state begin to appear in the eighth and seventh centuries, although others are curiously absent – for example, we might note that full-time religious specialists and a central monopoly on the use of force were very rare even in the fifth century, and Wright and Johnson’s (1975) criterion of a four-level settlement hierarchy is never easy to identify. As Runciman (1982) suggests, the historical background and the proximity of more advanced societies perhaps made it predictable that the Greeks would in time develop towards state institutions, through the processes of cluster interaction (Price 1977; 1978) or peer polity interaction (Renfrew and Cherry (eds.) 1986); but it was certainly not predictable that the general evolution of the state should have taken the specific form of the polis.

Archaeologists interested in the generalities of state formation often trace some of their questions back to Plato, writing at Athens early in the fourth century BC (e.g. Haas 1982, 21–5). Self-conscious political analysis and rigorous discussion of the origin of the state were probably invented in the polis during the fifth century BC. Although many factors affect the transmission to modern scholars of different types of written documents from ancient civilisations, it is not an accident that most early states produced no comparable tradition of political introspection. The social structure of the polis gave a central role to politics, and this had major repercussions.

I will argue that in the eighth century the Greeks developed a radically new concept of the state, which has no parallels in any other complex society. The Greeks invented politics, and made political relationships the core of the form of state which they called the polis. The essence of the polis ideal was the identity of the citizens with the state

itself. This had two important results. First, the source of all authority was located in the community, part or all of which made binding decisions through open discussion. The second consequence was that the polis made the definition of the state as the centralised monopoly of force tautologous; force was located in the citizen body as a whole, and standing armies or police forces were almost unknown. The polis' powers were total: there were no natural rights of the individual, sanctioned by a higher authority; the idiom of power was political, and there was no authority beyond that of the polis (generally, see Finley 1981a). We might also say that politics functioned as the relations of production (Godelier 1977). Of course in practice there were contradictions between the plurality of the citizen society and the unity of the state, but the contrast between the ideal of the polis as a political community of citizens and the ideals of the states of ancient Mesoamerica, Mesopotamia and even China could hardly be greater. The ethic of a polis was almost a stateless state, autonomous from all dominant-class interests by being isomorphic with the citizen body. The citizens *were* the state.

The polis

Citizenship is the key to understanding the polis. The fullest ancient account is Aristotle's, at the beginning of book three of his *Politics*, written late in the fourth century BC. For Aristotle, the essence of the citizen was the right to make judgements and to hold office, to rule and to be ruled in turn. However, as he pointed out, differences in constitutions meant that a man who qualified as a citizen in one polis might not qualify in another. Aristotle perhaps used this definition of the citizen as an ideal type, towards which the citizens of a polis should tend (Johnson 1984); in any case, he distinguished between types of citizens, suggesting that there was such a thing as 'the citizen in a subject position', who would hold office only in the more open governments. The particular type of constitution – monarchy, oligarchy, democracy, or some mixture – would determine what proportion of the citizen body as a whole was in theory 'active'. The word *politeia* gives some idea of the peculiar unity of the citizenry and the state. It meant not only 'citizenship' but also the constitution and the political way of life, and at one point (*Politics* 3.1279a26) Aristotle even equated it with *politeuma*, the word for the citizen body as a whole. To both Aristotle and Plato, the polis was a strong community, a *koinōnia*, a group with a single united aim, and the excellence of a polis was to be judged according to how far the state aimed to fulfil the common advantage of the citizens (Mulgan 1977, 13–17).

Politeia is first attested only quite late in the fifth century (Herodotus 9.34), and it is clear that its sense was constantly evolving (see Bordes 1982). This raises the question of whether it is appropriate to speak of 'the rise of the polis' at all, or whether the polis idea grew imperceptibly over many generations. One of the aims of this book is to show that there was indeed a sharp, qualitative break in the structure of Greek society in the eighth century. I am not suggesting that the polis attained a final unchanging form at this time; rather, that the idea of the polis as a *koinōnia* emerged quite suddenly, and from that time on we can speak of the existence of the polis.

Around 600 BC, Alcaeus, an aristocratic poet from Mytilene on Lesbos, wrote



Fig.2 Sites mentioned in the text. Sites in Attica are shown in figs. 60–2 at the end of the book, with full bibliographies

- | | | | |
|-------------------------------|------------------------------|------------------------|----------------------------------|
| 17. Aegina | 48. Dreros | 47. Mallia | 26. Sicyon |
| 54. Ag. Andreas
on Siphnos | 20. Eleusis | 4. Marmariani | 51. Skales cave,
near Praisos |
| 10. Ag. Eleousa Pyriou | 65. Emborio on Chios | 22. Megara | 67. Smyrna |
| 8. Akraiphnion | 69. Ephesus | 23. Moulki | 27. Solomos |
| 59. Amorgos | 36. Epidauros | 30. Mycenae | 41. Sparta |
| 16. Anavyssos | 14. Eretria | 66. Mytilene | 15. Tanagra |
| 2. Ano Dranista | 28. Examilia | 32. Nafplion | 29. Tenea |
| 33. Argive Heraion | 57. Grotta on Naxos | 40. Nichoria | 21. Thebes |
| 31. Argos | 37. Halieis | 38. Olympia | 53. Thera |
| 35. Asine | 5. Iolkos | 55. Paroikia on Paros | 34. Tiryns |
| 19. Athens | 7. Kalapodi | 24. Perachora | 58. Tsikalario on Naxos |
| 12. Chalcis | 46. Karphi | 42. Phaistos | 18. Vari |
| 50. Chondrovolakes | 63. Kea | 3. Philia | 49. Vrokastro |
| 25. Corinth | 45. Knossos | 52. Phylakopi on Melos | 71. Vroulia |
| 61. Delos | 43. Kommos | 44. Prinias | 62. Xombourgo on Tenos |
| 6. Delphi | 56. Koukounaries
on Paros | 9. Ptoon | 64. Zagora on Andros |
| 1. Dodona | 13. Lefkandi | 39. Pylos | |
| 60. Donoussa | 70. Lindos | 11. Rhitsona | |
| | | 68. Samos | |

Neither finely roofed houses, nor the stones of well-built walls, nor even canals and dockyards make up the polis: but men do.
(Lobel and Page 1955, fragment Z 103)

and two hundred years later, Thucydides had the Athenian general Nicias say 'For men make the polis, not walls or ships' (Thucydides 7.77.7). Across these centuries, the *koinōnia* was the heart of the polis.

The citizen estate reproduced itself through descent, although, as Aristotle stressed, this was not a necessary condition (*Politics* 3.1275b22–33). The polis had many features of what anthropologists call a closed corporate community (Wolf 1957; 1966a, 86). In such a group, landholding is monopolised by insiders, and the community as a whole has a vague claim to the land transcending that of the individual household. Land cannot be alienated to outsiders. There is a tendency to endogamy, and the institutions of the community (at least in theory) favour leanings towards a rough equality between its members. But there are vital differences: in the modern world such peasant corporations are usually closed against the state – while in the polis, the community was the state. Further, in the polis only the citizens themselves belonged to the corporation; those within the residential group but without a political role – women, resident aliens, slaves – were excluded from the *politeia*.

While all poleis were based on this structure, many of their organisational features could vary, at least within certain limits. Griffith and Thomas (1981) have showed that not only all poleis but indeed all city-state societies tend to conform to a fairly standard pattern of settlement, population size, subsistence and political autonomy. The citizen body in the polis – the adult males – was not numerous; Aristotle, paraphrasing the fifth-century town planner Hippodamus, suggested ten thousand as an ideal number (*Politics* 2.1267b31), and Plato (*Laws* 5.737d–8e) recommended five thousand and forty. Some of the smallest poleis were well below Plato's figure, while fifth-century Athens had an unusually large citizen body, with perhaps 40,000 members, but scattered over an area of some 2,400 square kilometres.

Territorially, the poleis were compact. Athens, mentioned above, had few peers; most poleis had less than 1,000 square kilometres of territory. Tiny Kea, with an area of just 170 square kilometres, was until the fourth century divided into four independent poleis. The settlement pattern tended to be nucleated. Most poleis had a central town with markets, temples and a fortified acropolis, although the bulk of the population would usually live in villages. Isolated farmsteads were probably very uncommon. However, it is important to stress the unity of the town and the rural hinterland: evidence for significant economic and political divisions between town and country under normal circumstances is rare.

All poleis were technologically simple, and the vast majority of the population lived off the land, generally on very small holdings. Throughout antiquity, the trend was for an increase in the size of the estates of the elite, but the richest Greeks of the period covered in this book, 1100–500 BC, were far from wealthy by Roman or Near Eastern standards (see Finley 1985a, 97–104).

Where poleis differed most was in their constitutions, and the proportion of the

citizens who had the right to be politically active. It is likely that the citizens and their families co-existed with significant numbers of slaves in all poleis, and in some cases with legally defined resident aliens; in fifth-century Athens, these groups may have approached fifty per cent of the population, but elsewhere they were probably less prominent.

Finally, the poleis were autonomous. When the Spartans conquered and annexed Messenia in the eighth century the polis ideal was barely formed; while some would see the temporary union of Corinth and Argos in 392–386 BC as a sign of the beginning of the end of the polis. Great controversy surrounds the decline of the concept of the state as a *koinōnia*. The autonomy of the poleis was often curbed after the battle of Chaeronea in 338 BC and the incorporation of the Greek states into the Macedonian empire, but many of the institutions of the polis remained intact until the first century BC. The Romans seem to have succeeded in destroying the polis principle; by the time of the birth of Christ, it had effectively ceased to exist (Ste Croix 1981, 300–26).

This view of the polis is not universally accepted, and some of its critics must be mentioned. In a recent book, Gawantka (1985) traced the development of a tradition in German studies of the polis, culminating in Burckhardt's understanding of the word in 1898, which has largely remained with us. Gawantka's treatment of sixteenth- to nineteenth-century German historiography is convincing, but he does not demonstrate that the modern idea of the polis is not at the same time a good approximation to either the empirical realities or the ideal form of the ancient Greek states. That there were differences in ideas of the nature of the polis even in antiquity is clear enough (e.g. Thucydides 1.10.2; Pausanias 10.4.1), but the citizen estate was fundamental to the polis in a way which did not apply to the Mycenaean world or to the looser state formation called the *ethnos*, which flourished alongside the polis. (*Ethnos* is conventionally translated as 'tribe', 'nation' or 'people', which are all highly misleading.) The leaders of an *ethnos* could do most of the things that a polis did – wage war, raise taxes and make treaties, or put up public buildings; and both polis and *ethnos* had writing, temples, and similar sorts of settlement patterns (although the *ethnos* could be larger than the polis) and subsistence bases. The vital difference between them – which was fully recognised in antiquity (e.g. Aristotle, *Politics* 2.1261a29–30) – was sociological: the *ethnos* was not a political society. Gawantka's exegesis takes no account of the attitudes in the primary sources themselves.

Henri van Effenterre's *La cité grecque* (1985) rightly warns against too heavy a reliance on the fourth-century Athenocentric views of Plato and Aristotle for a definition of the early polis, but his attempt to reject the centrality of the citizen estate (1985, 24–5) is inadequate. The argument that the Minoan, Mycenaean and Classical state forms can all be called poleis in the same sense ignores the fundamental structural contrasts between the worlds evoked by Alcaeus and Thucydides and the Bronze Age palace societies. It is true that the historian of the polis can learn much from the study of the Bronze Age states (Cherry 1984), but that does not make them the same thing.

All the poleis were of course constantly changing through time, forming kaleidoscopic patterns of diversity, and the fit between any ideal type and the multiplicity of empirical

realities must be poor. However, between the collapse of the Mycenaean world in the twelfth century and the first clear expressions of the polis in Archaic literature, a series of profound structural transformations took place. These form my subject matter. My proposition is that the emergence of the citizen estate, the essence of the polis, can be directly observed in the archaeological record, and can be pinpointed in the eighth century BC.

The rise of the polis

The Greek Early Iron Age is conventionally divided into the 'Dark Age', c.1100–750 BC, and the Archaic period, c.750–500 BC. Literary sources begin with Homer around 750 BC, but the textual evidence is always scarce and difficult to interpret. The emergence of the citizen estate is largely beyond the reach of written documents. The nearest thing to a model of the evolution of the state in fact comes from Aristotle:

The first community for more than daily needs is the village. The most natural village seems to be a colony from a household, the sons and the sons of sons, whom some call 'those suckled with the same milk' (*homogalaktes*). And because of this the poleis were at first monarchical, as are some tribes today; for they came together from monarchical parts, because each household is ruled by the eldest, so that the colonies of the family are likewise . . . The complete community of several villages is the polis, which has already almost reached the level of self-sufficiency, and having come into existence for the sake of life, it exists for the good life. Therefore the polis is wholly natural, if indeed the earlier communities are also natural; for this is their consummation (*telos*), and this nature is their end, for that which each thing is when its growth is completed we speak of as the nature of the thing, just as for a man, a horse, or a household. Further, that for which a thing exists, is its best form; and self-sufficiency is the best end. Therefore it is clear from these things that the polis is a product of nature and that man is by nature a creature of the polis (*politikon zōon*).
Aristotle, *Politics* 1.1252b16–53a3.

However, Aristotle's account was largely a philosophical construct with little or no empirical basis, and he was concerned to analyse the nature of the polis, rather than its history. Approaches to the rise of the polis must be archaeological. Some previous studies have concentrated on what I would call 'oblique' manifestations of the polis, such as population growth, 'urbanisation', fortification and temple building (e.g. Snodgrass 1977; 1980, 15–84; 1986), oblique in that they are not unique to the polis, and so provide at the very most necessary but not sufficient conditions for its identification. Others have concentrated on symbols whose meaning cannot be extracted, such as van Effenterre's argument (1985) that Bronze Age Mallia on Crete was a polis in the full sense because it had an assembly place analogous to the agora of the Classical poleis. As Snodgrass has argued (1980, 154–9), a formally laid out agora was not even a necessary condition for the polis. At Dreros on Crete, the agora may have been laid out in the late eighth century; at Megara Hyblaea in Sicily, it came only in the mid-seventh century,

perhaps three generations after the foundation of the colony; while at Athens, Corinth, Argos and Eretria – four of the most famous poleis – the agora becomes recognisable only in the sixth century.

Neither of these approaches is satisfactory, in that they do not touch on the core of the polis, the *koinōnia*, and neither offers the possibility of understanding the nature of society between the fall of the palaces and the rise of the polis. For long it was held that early Greece had an Indo-European ‘tribal’ structure, with Morgan-style gentile groups sharing property, and evolving into the State through the decline of the family (Fustel de Coulanges 1980 [1864]; only slightly modified by Francotte 1907, 96–105; Glotz 1929, 18–32). Many of the excesses of this view were quite rapidly shed, but the tribal myth, with an evolution from kinship to politics as the organising principle, on the lines of the blood-to-soil argument of classical evolutionist anthropology, has only recently been exploded (Roussel 1976; Bourriot 1976; Donlan 1985; Finley 1985b, 90–3). The supposed tribal survivals in the Classical poleis of the fifth and fourth centuries have been shown to have been absent in the seventh and sixth centuries, and not to appear at all in the looser ethnos states, commonly assumed to have been less developed and hence more ‘tribal’. As Snodgrass points out (1980, 25–6), this makes the problem of understanding Dark Age social organisation that of the archaeologist.

In early Greece, the archaeological record almost always means the archaeology of graves. Archaeologists of all schools are agreed that burials should be studied in the light of settlement and cult evidence; but, for much of the Dark Age, such evidence is scarce indeed. This imbalance in the archaeological record will be a problem familiar to archaeologists working in many parts of the world.

The main body of this book is given over to the analysis of the archaeological evidence. In the first part, I attempt to formulate explicit theories of the complex relationships between burial and society, and to demonstrate their relevance to early Greece. It will be argued that burials are to be treated as the material remains of self-representations of social structure through the agency of ceremony. My method in the second part of the book is to begin with a full study of the material available from Attica, the united town and countryside of Athens. Athens was perhaps rarely typical of the poleis, but provides not only the bulk of the literary evidence, but also the fullest archaeological sequence. The Attic data have been quite fully studied, and the chronology is relatively fine grained. Further, the consistent use of single burial allows a more refined analysis. By tracing changes through time in the structure of the funerary record and analysing these in the light of the literary evidence, it may be possible to follow the emergence of the polis. I propose to show that the idea of the state of the citizens emerged in the mid-eighth century, but that Athens was different from the other early Greek states, and returned to a social structure we might label ‘pre-political’ around 700 BC. The funerary evidence supports the widely held assumption, based on the accounts of Herodotus and Aristotle, that the citizen estate made a rather sudden appearance at Athens in the last decade of the sixth century as a consequence of Cleisthenes’ reforms, but I will further argue that this legislation only represents the formal recognition of long-term changes in political and social thought in sixth-century Attica.

The propositions will be justified by asking questions which are answerable from the archaeological evidence. I will first try to show that formal burial within spatially defined cemeteries was considered a primary symbol of the social group monopolising full membership of the community, through lineal descent from the dead. It will then be argued that throughout the Dark Age, formal burial of this type was limited to a restricted age and rank group which, using the terminology of the early Greek poets, I will call the *agathoi* (the 'good men'); that this system of ideas was overturned c.750 BC, but only briefly; that a reaction had set in by the early seventh century, with a return to the limited use of formal burial; and that the burying group widened during the sixth century, but that the pattern of Classical Athenian funerary behaviour was established only c.510 BC.

The proposals of archaeologically invisible disposal for parts of the population and the link between formal burial and full membership of the community might seem surprising, but I hope to show that both have a firm evidential basis. In the final part of the book, it will be suggested that the widening of the burying group c.750 BC was part of a panhellenic trend, which, in the light of other evidence, must be seen as the rise of the polis concept, whereby (probably for the first time in history) state organisation was founded on the principle of citizenship. It will be argued that the radical transformation of the community in the eighth century should probably be understood as the result of the struggle of dependent peasants against a Dark Age aristocracy. The extent to which relations of dominance were overturned varied from one polis to another; at Athens, it seems that the nobility successfully reasserted themselves after 700 BC. Ultimately, the old-fashioned type of polity was unable to succeed; the struggles of the seventh and sixth centuries eventually tipped the balance decisively towards the polis concept, recognised in the far-reaching reforms effected by Cleisthenes.

The proposition of changes in the membership of the cemeteries has been arrived at through consideration of the *structure* rather than the *content* of the archaeological record. Instead of comparing forms of burial customs through time and space, it will be possible to trace changes in the principles which guided funerary behaviour and in the concept of the community. The use of role theory and componential analysis, outlined in Chapters 2 and 5, allows an advance beyond purely empirical considerations. Previous studies have been primarily descriptive or chronological in aim, mainly because of a failure to formulate explicit theories linking the observable data with the behaviour which produced them. I will begin by considering such theories on a general level, and will then move on to primary literary and iconographical evidence which can be used to support the relevance of the models to this particular case.

This diachronic, contextual approach to the archaeological evidence has its roots in some of the recent criticisms of the nomothetic goals of the New Archaeology as well as in historical practice. The 'post-processual' archaeologists have stressed the importance of the particular situation in understanding the material record, but so far there has been little closely argued empirical research to follow up the reaction against the positions of the 1970s. Most studies have been very short papers, often in the Cambridge *New directions in archaeology* series. One notable exception is Richard Bradley's *The social foundations*

of *prehistoric Britain* (1984): but even here, the huge subject – nearly four millennia of British prehistory – meant that Bradley could not present his researches in very much depth. I hope that the present book may partly fill the gap.

There is some danger here of falling between two or even three stools, in that the theoretical and methodological perspectives of ancient historians, prehistorians and Classical archaeologists tend to be very different (Snodgrass 1977, 2–7; 1985), but I will try to write in a manner comprehensible on both sides of what Renfrew (1980) has called the ‘Great Divide’. Neither ancient historians nor Classical archaeologists have made much use of the advances in archaeological theory and method of the last quarter-century. This is an unfortunate situation, given the great quantity of archaeological evidence available from the Mediterranean civilisations, and the general excellence of the typological and chronological studies. When rigorous theory has been applied to these vast bodies of data, as for the Aegean Bronze Age, there have been significant results (e.g. Renfrew 1972; 1985). Processual archaeologists wishing to test laws may find the Mediterranean a congenial climate, particularly given the sometimes rich literary evidence from Classical Greece and Rome; while ancient historians and Classical archaeologists will learn much to their advantage from closer study of the methods of prehistoric archaeology. A rapprochement can only be to the benefit of all parties.

The Early Iron Age in Greece

I will use the rest of this chapter to provide a background for the study of the burials. First, a brief description of the chronological system and its limitations is in order, and after this, a summary of normative burial forms, for those unfamiliar with the archaeology. The chapter closes with an overview of developments in the eleventh to sixth centuries, and a discussion of the literary sources. Much is disputed in this period, and the account given at this stage will be a very bare one, intended merely to allow those new to Greek history to orient themselves.

Chronology

The chronological system for the Early Iron Age is based on pottery styles. There are many problems in the conventional dating, and, since absolute chronology is often important in the arguments of Chapters 4–7, I will discuss some of the difficulties here at the outset.

The dates given to Athenian vases derive from the fundamental path-breaking studies of J.M. Cook (1934/5), Desborough (1952), Coldstream (1968) and others, and for the sixth and fifth centuries from the connoisseurship of Beazley. The studies have been largely stylistic, with little stratigraphical basis (often because no adequate stratified sequence existed). A few ‘fixed point’ synchronisms have been established, and the ceramic sequences have been stretched between these to make a continuous sequence. The standard periodisations for the Attic sequence and the accepted absolute dates are shown in table 1.

Athens was not the only production centre for fine pottery in the Aegean, and other regions had their own sequences. Inevitably, the overall picture is complex and often confusing. Figure 3 summarises some of the main local chronologies. The relative dates

Table 1. *The periodisation of Attic pottery styles used in this book**

<i>Style</i>	<i>Abbreviation</i>	<i>Absolute dates</i>
Submycenaean	SM	c.1125–1050 BC
Early/Middle Protogeometric	EPG/MPG	c.1050–975 BC
Late Protogeometric	LPG	c.975–900 BC
Early Geometric I	EG I	c.900–875 BC
Early Geometric II	EG II	c.875–850 BC
Middle Geometric I	MG I	c.850–800 BC
Middle Geometric II	MG II	c.800–760 BC
Late Geometric Ia	LG Ia	c.760–750 BC
Late Geometric Ib	LG Ib	c.750–735 BC
Late Geometric IIa	LG IIa	c.735–720 BC
Late Geometric IIb	LG IIb	c.720–700 BC
Early Protoattic	EPA	c.700–675 BC
Middle Protoattic	MPA	c.675–650 BC
Late Protoattic	LPA	c.650–625 BC
Transitional	Tr	c.625–575 BC
Black Figure	BF	c.575–525 BC
Early Red Figure	ERF	c.525–500 BC

* I will also frequently refer to the Protogeometric (1050–900), Geometric (900–700) and 'Orientalising' (700–575 BC) periods as whole units.

are often based on cross-referencing from the Attic and Corinthian series, themselves not completely secure, and the results are not always reliable. No useful carbon-14 sequence is yet available.

Synchronisms

The earliest 'fixed point' is the settlement of the Philistines in modern Israel, very probably shortly after their defeat by Rameses III of Egypt in 1205, 1191 or 1180 BC. 'Philistine Ware' shows close affinities with Mycenaean Late Helladic IIIC 1 b pottery, making it probable that Attic Submycenaean, which developed out of this style and which Furumark (1972 [1941], 576–82) classified as Late Helladic IIIC 2, was beginning to be produced by 1100 BC (for the Philistine links with Greek and Cypriot pottery, see Dothan 1982; Brug 1985). Some scholars would bring down the date of the origin of Submycenaean towards 1050 BC (Renfrew 1985, 84–7; Mountjoy 1986, table 1) but their accounts do not include the Philistine material.

After this, the next 'fixed points' come only in the eighth century. Five sherds from an Attic Middle Geometric II krater and three sherds of Late Geometric pottery from the Cycladic islands were found at Hama in a destruction layer assumed to be the sack by Sargon II of Assyria in 720 BC, providing a terminus ante quem (also assuming that the small amount of material is not residual). The pottery from Al-Mina suggests that the Greek Late Geometric styles were no longer being produced and exported by the early seventh century, although there are some problems with the stratigraphy and interpretation of the site (Descœudres 1976; 1978). Another possibly important synchronism is provided by grave 102 at the Greek colony Pithecusae, which included a scarab of pharaoh Bocchoris (720/18–715/12 BC) and vases of the Early Proto-corinthian style, which replaced Late Geometric at Corinth.

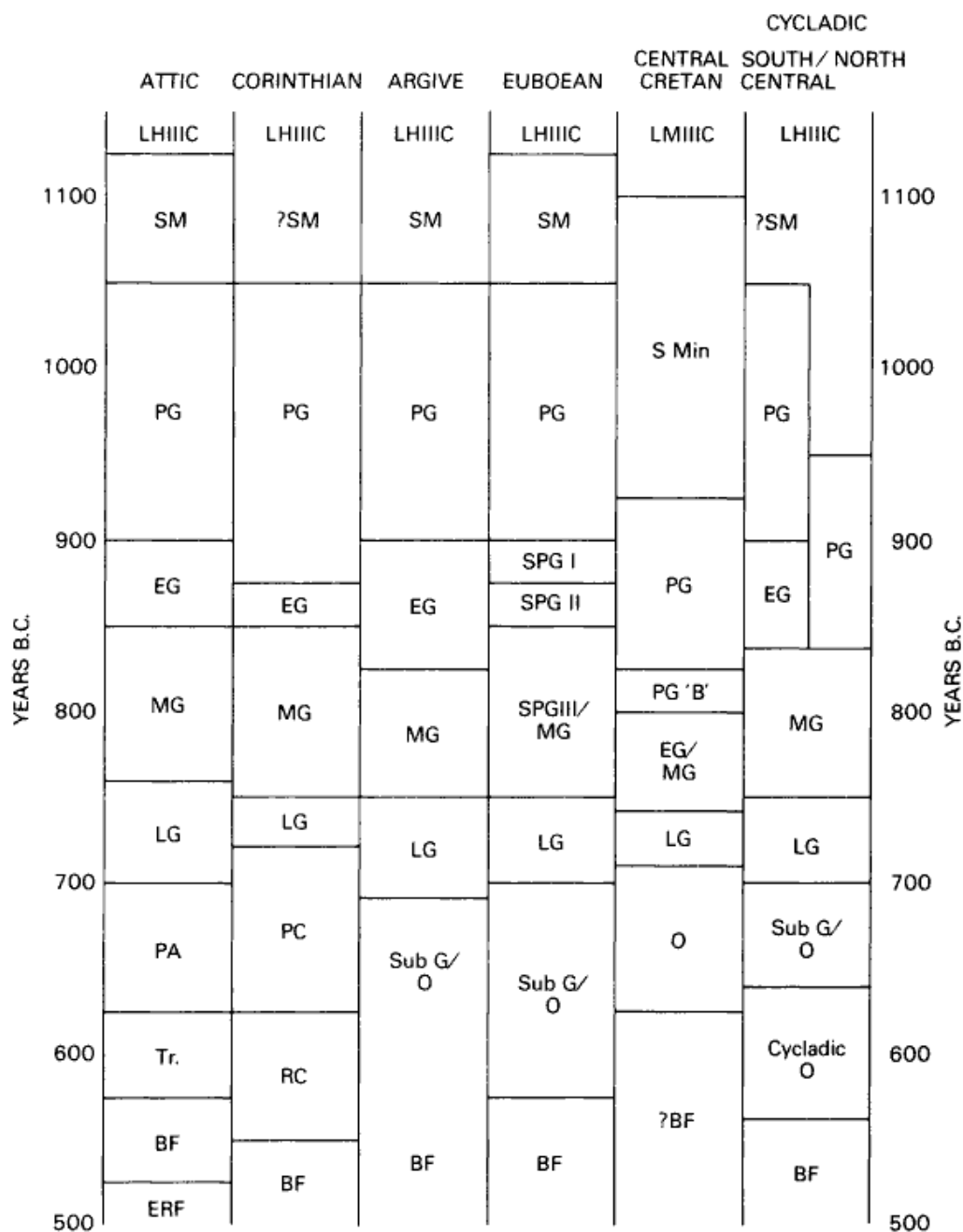


Fig.3. Local pottery chronologies. The six regions shown are those referred to most often in the text. The abbreviations used are: LH IIIC, Late Helladic IIIC; LM IIIC, Late Minoan IIIC; SM, Submycenaean; SMin, Subminoan; PG, Protogeometric; PG 'B', Protogeometric B; SPG, Sub-Protogeometric; EG, Early Geometric; MG, Middle Geometric; LG, Late Geometric; SubG, Sub-Geometric; O, Orientalising; Cyc O, Cycladic Orientalising styles; PC, Protocorinthian; RC, Ripe Corinthian; PA, Protoattic; Tr, Transitional; BF, Black Figure; ERF, Early Red Figure. The best general survey of pottery styles is R.M. Cook (1972)

Between the twelfth and late eighth centuries, there is very little dating evidence. Small quantities of Greek Geometric pottery have been found in possibly datable contexts at Tell-abu-Hawam, Megiddo and Samaria, but there is controversy over the dating of the deposits and over the relative chronology of the sites. A *terminus ante quem* for the start of Attic Middle Geometric can be established only as being somewhere between the late tenth and late ninth centuries.

It is abundantly clear that these synchronisms are not very secure, although the system as a whole is at least fairly consistent internally. The figured styles of Attic Late Geometric allow the identification of individual hands, and the cross-influences of these make it highly unlikely that the known schools were operating over a period longer than sixty to seventy-five years. If we tentatively date the end of the style around 700 BC, then the first Late Geometric figured painter recognised, the Dipylon Master, can be placed roughly about 760–750 BC. This leaves some three hundred and fifty years for Submycenaean to Middle Geometric II.

The length of Submycenaean has been variously estimated at from twenty-five years (Iakovides 1979, 462) to seventy-five years (Snodgrass 1971, 123). It is generally taken as a short period because of the lack of development between its earliest phases and the appearance of Protogeometric. It has even been suggested that Submycenaean was a purely ritual style used in burials, overlapping in time with Late Helladic IIIC and perhaps Early Protogeometric settlement material. In the Klepsydra spring at the foot of the Athenian acropolis, these two styles were found in a stratified sequence without an intervening Submycenaean phase (Smithson 1977; 1982, 153–4), and at Corinth Submycenaean seems to be contemporary with the final Late Helladic IIIC settlement material (Rutter 1981, 61). However, stratified deposits at Mycenae and Tiryns suggest that while there was an overlap, Submycenaean did continue in use after Late Helladic IIIC (Mountjoy 1986, 194). I will follow Snodgrass' absolute chronology; a Submycenaean phase more than seventy-five years long is very unlikely, while compression into a briefer time span would in fact favour the arguments of Chapters 4–7 below.

In Protogeometric to Middle Geometric, there are no good guides to absolute chronology. Coldstream placed the Protogeometric/Early Geometric division around 900 BC, but there is little positive evidence beyond subjective interpretations of the rate of stylistic change in vase painting. Alternative approaches assume either a constant rate of ceramic production or else a constant rate of deposition of burials belonging to each phase. Neither argument is satisfactory, and indeed can often produce completely circular reasoning. However, at present no real alternative exists. The safest approach is to treat Protogeometric to Middle Geometric as a single period of approximately three hundred years' duration. Relative dating within this long span is easy, but absolute dates in the tenth and ninth centuries must be viewed with some suspicion. In what follows, I will sometimes speak in the absolute dates shown in table 1, rather than of Late Protogeometric or Early Geometric; however, these dates must be treated as purely conventional signposts, and should not be allowed to create a false sense of security.

The chronology of the Archaic period is only somewhat more precise. Fixed points are provided by the sack of Mesad Hashavyahu (c.630–609 BC) and of Smyrna (c.590 BC), and the Burghon grave group at Athens, which probably (although not necessarily)

dates to 566–550 BC. For most of the seventh century, artistic criteria remain important. The dates for Protoattic are derived entirely from cross-referencing with the Proto-corinthian series, which is itself dated primarily from Payne's (1931; 1933) and Benson's (1953) connoisseurship. The vertical stratigraphy of the tumuli in the Kerameikos cemetery at Athens has confirmed Payne's system to a great extent (Kübler 1959, 105–23), although the allocation of particular spans of time to the sub-phases of Proto-corinthian and Protoattic has no evidential basis (Dunbabin 1953/4, 258–62).

One of the most tempting sources for late eighth- and seventh-century synchronisms with Corinthian pottery is the foundation dates for the Greek colonies given by Thucydides, but this approach has not been very successful. There are some obvious archaeological problems – in settlement areas, we cannot be sure that the earliest material has been found, nor can we be sure that all the Greek pottery post-dates the foundation of the colony, rather than being trade before the flag. With cemeteries, there is the extra problem of how soon after the foundation we should expect burials to be frequent, given that the colonists will often have been young and vigorous. There is also a major historiographical problem, for the dates Thucydides gives may have been invented in the first half of the fifth century BC by the Syracusan historian Antiochos (van Compernelle 1960; M. Miller 1970). However, apart from some problems with Tarentum, Megara Hyblaea and Selinus, Thucydides' dates *do* seem to match up tolerably well with the dates for the pottery derived from the Near Eastern sources and stylistic arguments (see Graham 1982, 83–91).

In the second half of the sixth century, dating evidence is much better, and we can be reasonably confident that from Late Geometric onwards the rough outlines of the absolute chronology are fairly secure. R.M. Cook (1969) has argued that any deposit of the eighth and seventh centuries should be datable to within twenty-five years, and most archaeologists feel confident within a margin of fifteen years in the fifth century (Tölle-Kastenbein 1983). The recent attempts by Francis and Vickers (1981; 1983) to effect a radical down-dating of sixth- and fifth-century art have met with little success (see Boardman 1984).

Methodology

Before leaving chronology behind us, another matter must be raised: the theoretical foundations of the Classical archaeologists' approaches to pottery chronology. The general assumption seems to be that a pottery style is a monolithic entity, a sort of block of culture, appearing in the world, going through a cycle of birth, maturity and decay, and then disappearing. This is sometimes a reasonable view: for instance, in the Archaic Kerameikos cemetery, the stratified deposits show a very clear development from Late Geometric to Black Figure, with each phase quite sharply defined. However, this does not always apply, and we must be prepared to conceptualise ancient pottery assemblages as parts of functioning systems of material culture, belonging to living societies. We must consider how pottery was being used and the profound effects this might have on the construction of chronological systems.

The entities used in pottery chronologies are polythetic attribute sets. That is, a taxon like 'Attic Late Geometric' consists of a large set of attributes, as described by

Coldstream (1968, 29–50), and to qualify as a member of this set a vase must have most, but not necessarily all, of these attributes. It follows that some vases will be more ‘Late Geometric’ than others; at any time in the Late Geometric period, people will have been making and using some vases which had many Middle Geometric attributes, some which scored highly in the Late Geometric set, and some which had attributes to be found in the succeeding Protoattic set, as defined by the archaeologists. There is no way to tell in advance of detailed empirical study how ‘modal’ the whole pottery assemblage would have been at any given time. Figure 4 is a schematic representation of the argument: the five curves represent five possible structures for pottery styles, being clustered more or less closely to the attributes in the defining set (see Clarke 1978, 180–95).

We must therefore expect overlap between the different pottery styles, and should be more explicit about the merging of types into one another. But the problem of varying modality in pottery styles does not operate solely along a temporal axis; we must also anticipate variation at different levels of the structure of the pottery assemblage in use at any one time. It was observed above that the pottery in the Kerameikos graves had a very modal pattern of development, which we might compare to curve A in figure 4. This does not necessarily mean that contemporary settlement pottery was equally modal; and there is indeed some evidence that ‘Geometric’ motifs continued to be very common in domestic wares into the seventh century BC.

One useful approach is to set up a simple model of the levels of the pottery assemblage. In a study of the Beaker network in Early Bronze Age western Europe, Clarke suggested a hierarchy of subassemblages within peasant pottery assemblages: fine prestige wares, everyday utility wares, and heavy duty storage wares. The modality of each

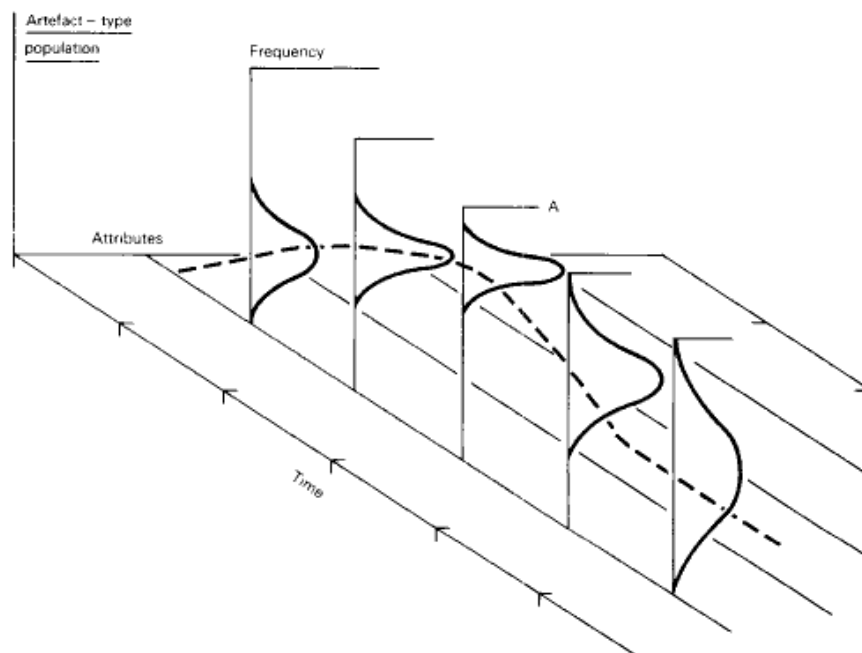


Fig.4 Clarke's schematic model of successive distributions of a hypothetical artefact-type population, with shifting mode and spread, and changing standard deviation (after Clarke 1978, fig.42)

subassemblage can differ, and one level of the total assemblage can be replaced by a new style without the other levels changing noticeably. Further, we might expect the different levels of the assemblage to be used in different contexts – for example, fine wares in ritual/funerary activities, utility in domestic activities, etc. – although this will vary through time and through space (Clarke 1976).

Finally, we must bear in mind the effects that the use of material culture as active symbols might have on our chronology. When one style of very fine ware replaces another – for instance, when the fluid, Orientalising motifs of Protoattic replaced the more rigid Late Geometric painting – the displaced style does not necessarily simply disappear; often it will seem to move down the social ladder, particularly if some individuals or groups within society attempt to emulate others by adopting their styles or products (see D. Miller 1985, 184–205). It should be noted, though, that emulation is

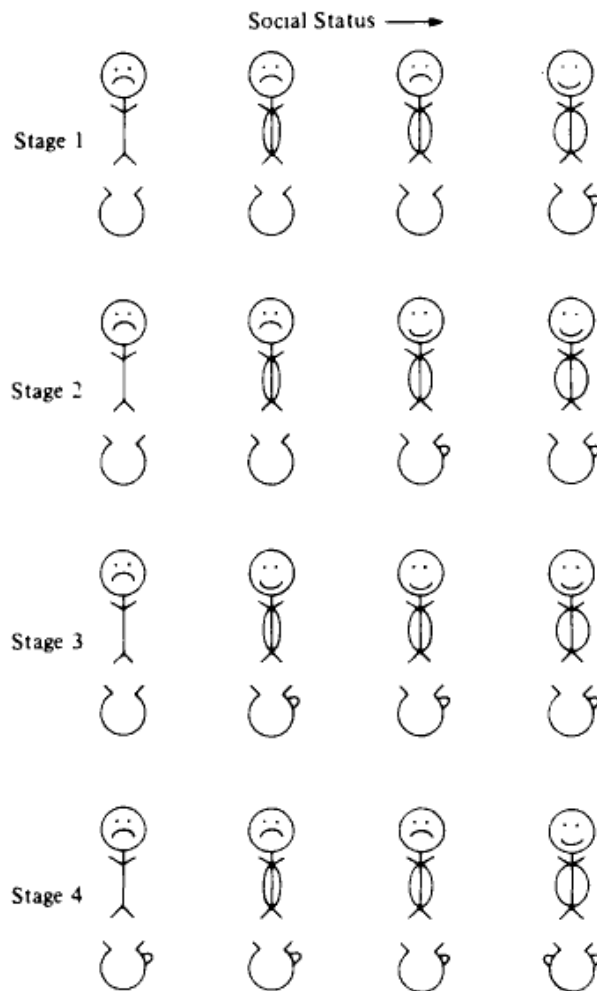


Fig.5 A model of the process of emulation: while the social hierarchy remains constant, the process of emulation provides a dynamic force producing continual change in material items. Stage 1: highest status group adopts a change in conventional pottery form. Stage 2: second highest status group adopts innovation. Stage 3: third highest status group adopts innovation. Stage 4: lowest status group adopts innovation, but by this time highest status group has adopted another change and thereby maintained the contrast (D. Miller 1985, fig.53; see also Appadurai 1986)

rarely quite so pervasive as in the caste system which Miller concentrates on). This model has been applied successfully to the chronology of Neolithic and Early Bronze Age southern Britain (Bradley 1984, 70–3).

These problems demand a new approach to pottery chronology. As noted above, the funerary pottery styles seem to have been modal in Iron Age Attica, in that deposits of vases in graves are generally very homogeneous; but there may well be greater complexity at other levels of the assemblage. The likelihood that Submycenaean was a ritual style used only in a small number of contexts, while Late Helladic IIIC was the normal domestic ware, has already been mentioned. Further research may demonstrate similar structures in the pottery assemblages of other periods, and may account for some of the acute difficulties which have arisen in Iron Age chronology. One of the most glaring inconsistencies concerns the site of Tarsus, burned by Sennacherib of Assyria in 696 BC. On a floor dated by the excavators as well before the destruction, and possibly as early as 750–725 BC (Hanfmann 1963, 115), were found an East Greek bird bowl and a Protocorinthian aryballos, both usually placed well into the seventh century. These finds contradict the usual framework, but rather than question the assumptions on which it is built, the response has been to argue the evidence away by suggesting that Sennacherib's sack affected a different part of the site, and that the destruction fill in this area was much later than 696 (Boardman 1965). Boardman's case is well put, but the refusal to consider alternative approaches to chronology is a disquieting one.

The publication of the stratified deposits from the Anaploga well at Corinth is another illuminating case. Here, Early and Middle Protocorinthian sherds occurred quite densely in the top strata, and occasionally lower down in levels with Ripe Corinthian pottery, which is normally dated later than Protocorinthian. Once more, rather than question assumptions about the nature of pottery chronology, the excavators adopted a tortuous explanation:

It is difficult to avoid concluding that in the early sixth century a great quantity of pure Middle Protocorinthian and earlier pottery was present in virtually exposed deposits very near the mouth of the well. Twice in the period c.580–c.560 BC considerable amounts of pottery from these early deposits entered the fill. That, at other times, early sherds were 'kicked in' singly indicates their proximity to the mouth of the well. (Amyx and Lawrence 1975, 67)

Again, the explanation is possible, but an alternative account, viewing pottery assemblages in terms of how they were used by living communities, might mean far fewer difficulties. Some of the more serious problems produced by the conventional taxonomy will be returned to in Chapter 9.

Conclusion

The fragility of the Early Iron Age chronology should be very clear by now; but the system as it stands is at least coherent and fairly consistent. The taxa of table 1, I would suggest, relate chiefly to fine, ritual pottery, and while the discussion is confined to burials, the conventional chronology will provide an acceptable working frame of reference. Sub-

divisions such as the a and b phases in Late Geometric I and II are overfine, and will generally be avoided; and it is perhaps wise to treat Protogeometric and Early Geometric as single periods. The names Transitional, Black Figure and Early Red Figure perhaps require some comment. By the sixth century, Athenian figured vases can usually be attributed to individual painters, and many Classical archaeologists feel it would be a retrograde step to periodise the material as I have done. These rather inelegant categories are used to complete a consistent system down to 500 BC; and Transitional is certainly a more convenient label than 'between the Painter of Berlin A 34 and Sophilos'. These particular divisions have been chosen to bring out the patterns in the burial evidence as clearly as possible.

The most important cemetery at Athens is the Kerameikos, and for this site I will follow the Dark Age chronological system devised by Krause (G. Krause 1975, 153–9). This system builds on Hachmann's study (1963), concentrating on the development of the cemetery itself rather than solely on stylistic assessment of the pottery. This allows a much more rigorous approach to the Kerameikos, but cannot be extended to other cemeteries, for which the conventional system must be followed (see table 2).

Burial customs

Iron Age Greek burial customs were even more regionally diverse than the pottery styles. I will limit myself to an account of Attica here; the customs of other regions will be described in the appropriate places later in the book.

Submycenaean Single burial was the norm in Attica from Submycenaean onwards, marking a break with the Bronze Age multiple burial practices. The main Submycenaean cemeteries are at the Kerameikos in Athens, and on the island of Salamis. At the Kerameikos, the burials were usually extended supine inhumations, mostly in cist graves (earth cut pits walled and sometimes covered and floored with stone slabs). At Salamis, most burials were flexed. In both these cemeteries there were a few cremations, with the ashes placed in a jar. Grave goods were generally poor.

Sex had little influence on grave forms, and children were generally buried in cists or in simple pit graves, without stone walls. As Submycenaean wore on, pit graves became more common for adults too.

Protogeometric to Middle Geometric At the beginning of Protogeometric, inurned cremation totally displaced inhumation for adults, and reigned supreme for the next three centuries. By and large, men were buried in neck-handled amphorae, and women in shoulder or belly-handled amphorae. There were, however, developments in grave forms. In Early Protogeometric, the urn was placed upright in a hole cut in the centre of a trench, into which the pyre debris was swept, and then earth was thrown in on top. By Late Protogeometric, it was customary to put the cutting for the amphora at one end of the trench, where it remained until Middle Geometric times. This grave form is often called the trench-and-hole cremation. In the early eighth century, however, increasing numbers of graves do without a special hole for the amphora. In Late Protogeometric, evidence begins for gravestones and marker vases: usually kraters for men, and

Table 2. *Krause's Kerameikos chronology*

Krause's phase	Pottery phase	Source of stylistic dates
Zeitstufe 1	ESM	Styrenius 1967
Zeitstufe 2a	MSM	
Zeitstufe 2b	LSM	
Zeitstufe 3	Transitional/EPG	Styrenius 1967; Desborough 1972, 147–55
Zeitstufe 4	MPG	
Zeitstufe 5	LPG	
Zeitsutfe 6a	EG	Coldstream 1968
Zeitstufe 6b	MG I	
Zeitstufe 7	MG II	
Zeitstufe 8	LG Ia/b	
Zeitstufe 9a	LG Ib/IIa	
Zeitstufe 9b	LG IIb	
Zeitstufe 10	LG IIb/ Subgeometric	



Fig.6 Submycenaean cist graves: Kerameikos grs.SM 17–21 and 24 (Kraiker 1939, pl.1; German Archaeological Institute at Athens, Neg. Nr. Ker. 2324)

amphorae for women. Not infrequently, the upper part of the shaft of the grave was left unfilled (see fig. 7).

Throughout this period, the published child graves are usually pit inhumations. Grave goods were fairly consistently poor, although there was an all round increase c.925–825 BC, and a few very rich graves have been found. The Ag. Triada plot in the Kerameikos is the most important site, but a major cemetery on Vasilissis Sophias Avenue was excavated in 1984. The Geometric grave groups on Kriezī and Kavalotti Sts are also very significant. Outside Athens, evidence begins to increase around 900 BC, with important plots at Anavyssos, Eleusis and Nea Ionia, and some settlement evidence at Thorikos.

Late Geometric Inhumation returned with force in the second quarter of the eighth century. The usual grave type was supine extended inhumation in a pit grave or fairly simple shaft grave for adults and older children, and inhumation inside a vase for the very young. However, a not insignificant number of adult males were cremated and buried in an amphora or a bronze cauldron. The Kerameikos is rivalled in significance by Athenian cemeteries on Kriezī St and Peiraios St (the famous 'Dipylon' cemetery) and the Agora Tholos cemetery (so-called after a round building of Classical date). Large cemeteries are known from the Attic countryside: those at Anavyssos, Eleusis, Merenda, Thorikos and Trachones are particularly interesting. There was some variety in practices around Attica. At Anavyssos, Thorikos and Vari, cists were very popular; while at Trachones, primary cremation with the ashes dumped on the floor of the grave was dominant. At Anavyssos and the Academy (and perhaps Trachones) children were cremated and the ashes placed in amphorae lying on their sides. At many sites, infant vase burials were cut into the shafts of adult graves. Some graves were quite rich, par-

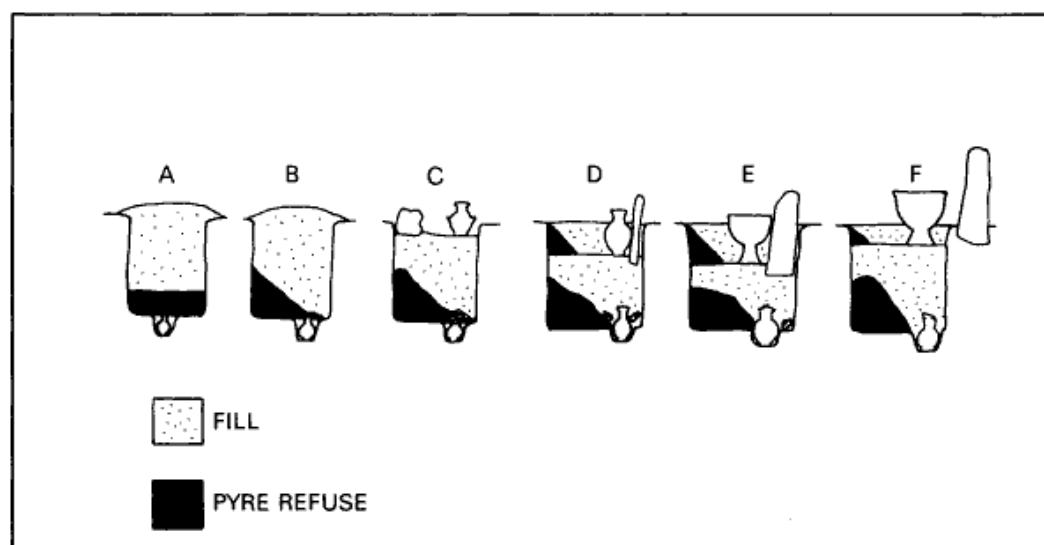


Fig.7 The development through time of normative forms of trench-and-hole cremations at Athens. A, Early Protogeometric form; B, Middle to Late Protogeometric; C, Late Protogeometric to Early Geometric; D, E and F, Early and Middle Geometric forms (based on Snodgrass 1971, fig.59)

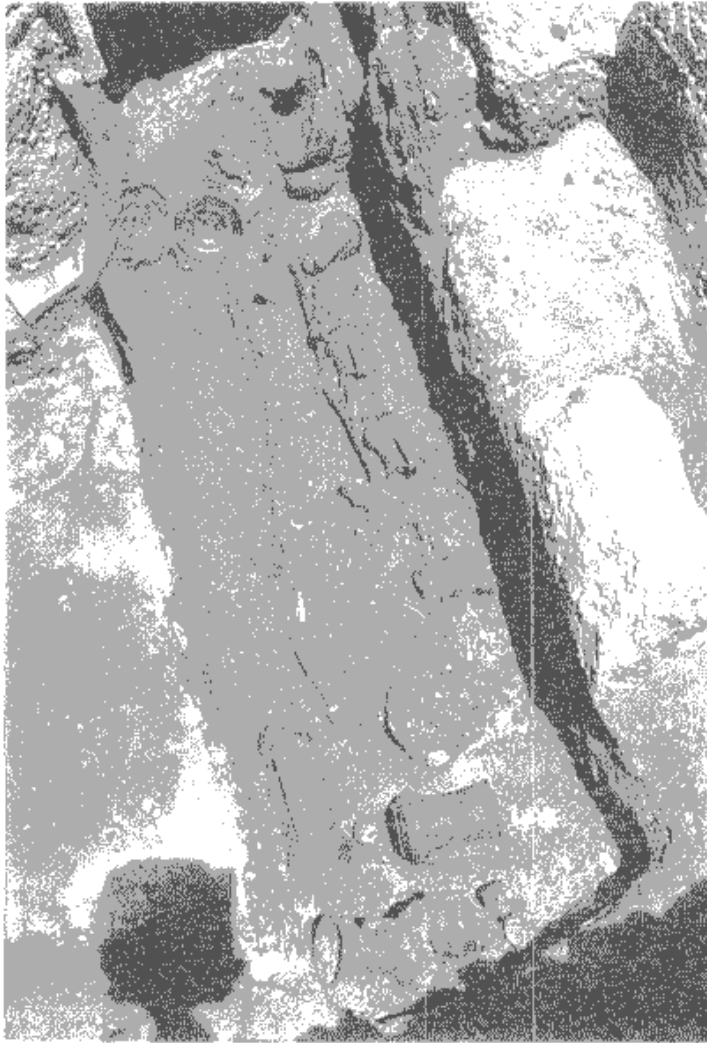


Fig.8 A rich Late Geometric inhumation: Kerameikos gr.VDAk 1, during excavation (Freytag 1974, pl.1.3; German Archaeological Institute at Athens, Neg. Nr. Ker. 7782)

ticularly in pottery (fig. 8), but before the end of Late Geometric quantities of grave goods were declining.

Protoattic/Transitional After 700, primary cremation became the norm for adults. The body was burned on a pyre within a pit grave, which would often have air vents cut into its bottom to make the cremation more complete. A few inhumations are known, perhaps mainly for adolescents; while children were generally buried in vases, as in Late Geometric. The adult graves seem to have been marked by mounds, which became larger and larger after 650. In the late seventh century, most graves began to be marked with mudbrick tombs rather than mounds, and funerary sculpture began to appear. Many of the finest examples came from the early fifth-century walls of Athens, for which grave monuments were pressed into service.



Fig9 Archaic graves in the Kerameikos: at the right is tomb k (c.550 BC), and in front of it is gr.CSG 1. In the centre are *Opferrinnen* from graves dated between 700 and 550 BC. The whole group was covered by the monumental Mound G (Kübler 1959, pl.4; German Archaeological Institute at Athens, Neg. Nr. Ker. 2315). This part of the cemetery is shown in figs.43 and 45 below; see also fig.62

Grave goods stopped rather abruptly c.700 BC, although vases were often placed in surface deposits known by the German name *Opferrinne* ('offering-trench'). The main cemeteries are the Kerameikos at Athens and Thorikos and Vari for adults, and Eleusis and Phaleron for children.

Black Figure/Red Figure By the mid-sixth century, inhumation was becoming more common for adults, generally extended and supine in pit graves. Grave markers reached a peak of magnificence in the third quarter of the century, and thereafter declined sharply. By 500 BC, child inhumations in clay tubs and in graves made from roof tiles were appearing. Generally, burial forms were getting simpler in Early Red Figure.

The main cemeteries at Athens are the Kerameikos and Agora Archaic cemetery, while c.510 BC new cemeteries seem to begin outside some of the city gates. The best known cemeteries beyond Athens are at Eleusis, Vari, Velanideza and Vourva.

Narrative background

The destruction of the Bronze Age palaces and the decline in the twelfth and eleventh centuries were mentioned at the beginning of the chapter. After this, little detail is possible

before the eighth century. A number of Classical and later authors refer to migrations in early times, and in particular a Dorian invasion, which might be seen as following this collapse. So far, no one has successfully identified an invasion in the archaeological record. If there *was* a major change in population in the Dark Age, then it had little impact on material culture, which evolved fairly smoothly from Mycenaean times onward (Snodgrass 1971). There has recently been excitement about small deposits of coarse, hand-made pottery termed 'Barbarian ware' found in a number of twelfth-century settlements, but its significance is as yet unclear.

There is a little evidence for an expansion of the settlement pattern around 900 BC, which might be partly associated with the later traditions of the Ionian migration via Attica to the west coast of Turkey. There was certainly increasing sophistication in craft products, and it has been suggested that the Greeks were in direct contact with Egypt by the late tenth century (Popham, Touloupa and Sackett 1982a, 247).

It is generally agreed that the eighth century was the decisive period. Snodgrass has argued that population rose dramatically – in places at a rate of four per cent per annum (1977, 10–18; 1980, 23–4; 1983). His argument is based primarily on numbers of graves, and the position taken in this book, that the proportion of the population represented by the excavated burials was not constant from 1100 to 700 BC, goes against this method, although it does seem likely from settlement evidence that there was some population growth at this time. Snodgrass has also argued that there was a general shift from pastoralism to sedentary cereal-based agriculture at this time (1971, 378–80; 1977; 1980, 35–8), but there is insufficient evidence to test this theory. The widespread assumption that kinship was replaced by politics as the basis of the community in the eighth century has already been mentioned.

One of the clearest developments in the eighth century is the rise of sanctuaries. The names of the gods in Mycenaean Greece were often the same as those of Archaic and Classical Greece, but there is very little material evidence for cult activity between 1100 and 800 BC. The question of religious continuity is hotly debated, but it is certain that the change in the archaeological record c.750 BC represents some major development. Spatially discrete sanctuaries appeared, often with very rich votives, which increased in the seventh century, but then began to decline. In some areas, grave goods declined in the late eighth century; the two processes were very probably linked.

With the appearance of the alphabet around 750 BC, our record of Greek history changes fundamentally. Homer's poems were probably written down before 700, the *Iliad* being slightly earlier than the *Odyssey* (Janko 1982; Kirk 1985, 1–10), and from that time onwards the archaeological data are augmented by texts.

However, the use of the textual evidence is rarely straightforward. All the seventh- and sixth-century sources are poems, often preserved only in tiny fragments. The earliest narrative prose history is Herodotus' account of the Persian Wars (490–479 BC), written between the 440s and 414 BC. The use of fifth-century and later sources for Archaic Greek history is fraught with difficulties; and the primary evidence of the poets can be even more troublesome.

The main problem is orality. Throughout antiquity, the Greek world was primarily one of the spoken rather than the written word. Homer's poems, and perhaps the early

seventh-century *Works and Days* and *Theogony* of Hesiod too, were oral compositions. They probably became texts through dictation to a scribe. Homer's value as a source is one of the major battlegrounds of early Greek history, but I will postpone a discussion until the start of Chapter 3. The problems of the secondary sources are more relevant for the narrative outline being attempted here.

There are relatively few major sources of this kind, and I will concentrate on four main authors. Herodotus has been mentioned; his account includes long digressions, often delving back into Archaic times, although he saw the mid-sixth century as his real starting point (Herodotus 1.5). Thucydides, on the other hand, wrote a history of the Peloponnesian War between Athens and Sparta (431–404 BC), in which he was a participant. His work has fewer digressions than Herodotus', but it includes a fascinating summary of his interpretation of early Greek history (Thucydides 1.2.1–21.2).

The third major author is Aristotle. His *Politics*, referred to above, frequently alludes to early history. It is said to have been based on a collection of the constitutions of 158 states, of which one, the *Constitution of Athens*, survives almost complete. This first came to light in 1890, on the back of a set of papyrus financial documents of the first century AD. Classicists still debate whether it was actually written by Aristotle or one of his pupils, or was some sort of collaboration. The question is not very important here; but for the sake of convenience, I shall refer to the author of this tract as Aristotle. The work was written between 332 and 322 BC, and contains our fullest account of Archaic Athenian political history.

Finally, we have Plutarch, who wrote a set of *Parallel Lives* of Greek and Roman statesmen around AD 100, including a *Life of Solon*, the Athenian lawgiver active around 600 BC. Plutarch aimed to teach moral lessons, and belonged to a historiographical tradition which put little emphasis on accuracy, and often included spurious elements. Plutarch was probably one of the best biographers in antiquity, and had read extensively; however, in dealing with early Greece, he could only rely on what his sources had written, and generally speaking the *Constitution of Athens* is preferred by historians where it disagrees with Plutarch.

These writers ultimately relied almost entirely on oral traditions for their knowledge of Archaic times (generally, see Schepers 1975; Momigliano 1978). Five out of every six times Herodotus mentions his sources, they are oral (Waters 1985, 76), and the structure of his narrative and his notions of causation are strikingly reminiscent of oral literature (Lang 1984). Thucydides used Homer and observations about the world he lived in as sources for early Greece, but clearly relied most heavily on oral traditions (e.g. Thucydides 1.9.2). Similarly, the *Constitution of Athens* deals with early times mainly through a combination of oral traditions and other secondary sources, themselves reliant on oral information. The only primary source named in the *Constitution of Athens* is Solon; and the only other author cited at all is Herodotus. Historians' optimism that fifth- and fourth-century writers were able to draw on documents kept by boards of Athenian priests, going far back into the past, was shattered long ago by Jacoby (1949). It goes without saying that legends claiming to describe events of the Bronze and Dark Ages are highly suspect.

The main question must always be how reliable these oral traditions were. They can

rarely be tested directly. One case where an alternative account survives is Herodotus' story of the foundation of Cyrene, c.640 BC, and Davies has argued that this suggests that traditions could preserve tales of specific events in a relatively ungarbled form for generations (Davies 1984). Ultimately, though, we are reduced to generalisations based on comparative evidence. Opinions vary. On the whole, it would certainly be rash to dismiss all the stories out of hand, although the difficulties of cross-checking sources are a major barrier (generally, see Vansina 1985). We must be prepared to separate the events in the stories from the context, and to allow for the influence of current needs on the selection of the elements in the traditions (I. Morris 1986a).

What faith are we then to place in the particular stories which have survived about early Athens? Following Jacoby, I would suggest that few of the episodes before 550 BC can be trusted in any detail. There is currently a tendency to accept large parts of the *Constitution of Athens* as a fairly accurate summary of seventh- and early sixth-century history, after a long period of scepticism, but this may not be a welcome trend (see Hansen 1985). Traditions about early history were extensively manipulated in fourth-century Athens, and Aristotle or his sources often seem to misunderstand, conflate or invent their information. Some of these problems will be returned to in later chapters.

The literary sources allow us to work at a different level, but very little is clear in the seventh century. Most historians accept the hypothesis that there was a change in military tactics before 650 BC, with large citizen armies fighting in close formation supplanting smaller groups of aristocratic skirmishers. Great political significance is generally attached to this development, which is known as the 'hoplite reform', after the Greek word for a warrior (*hoplitēs*). However, this position has recently come under some pressure, and it seems to me that it is no longer tenable. In Chapter 10 I will argue that as far back as it can be traced Greek warfare always relied on massed formations of infantry, and that there is no reason to suppose that the 'hoplite reform' actually occurred.

The military change is often associated with the rise of dynasts, known as tyrants, from c.650 BC onwards. These unconstitutional rulers rarely lasted more than two generations before being overthrown, often to be replaced by oligarchies. Another major event, the appearance of the first written law codes during the seventh century, may be linked with tyranny in a single process of the consolidation of state institutions. Finally, it is worth noting that coined money began to be minted in the early sixth century, but its role in commerce was probably very limited.

The surviving portion of the *Constitution of Athens* begins with the aftermath of the Cylonian conspiracy (an incident also mentioned by Herodotus, Thucydides and Plutarch). Cylon, the son-in-law of Theagenes, the tyrant of Megara, is said to have failed in an attempt to establish a tyranny of his own at Athens, probably in the 630s. A little later, perhaps c.620, Dracon drew up the first published Athenian law code. A probably trustworthy fifth-century BC copy of his homicide law survives, but the account of the 'Draconian constitution' given by Aristotle is almost certainly spurious.

It seems that Athens was in a state of virtual civil war between the rich and the poor in the late seventh century. As a result, Solon was given special powers, probably while he

was archon (the chief magistrate) in 594/3 BC. He is credited with a new constitution and the abolition of debt-bondage. However, unrest is said to have continued. Damasias tried to make himself tyrant by refusing to give up the archonship in 582 and 581 BC, but was ousted. Three main figures – Lycurgus, Megacles and Peisistratos – struggled for power during the next generation, before Peisistratos (at the third attempt) installed himself as tyrant in 546 BC.

When Peisistratos died in 527 BC, he was succeeded by his sons Hippias and Hipparchus. Following Hipparchus' murder in 514/13 BC, Hippias' rule is said to have become harsher, and groups of Athenian aristocrats made a series of attempts to overthrow him, finally triumphing in 511 through the intervention of King Cleomenes of Sparta. Another period of aristocratic struggle began, between Isagoras and Cleisthenes. Isagoras seemed to be getting the better of it, until Cleisthenes in some fashion managed to involve the mass of the people. In 508/7 he carried through a series of constitutional reforms. Isagoras responded by calling back Cleomenes, reminding him that Cleisthenes' family was under a curse for their part in the defeat of the Cylonian coup. Cleisthenes fled before the Spartans, but the Athenians besieged Cleomenes and Isagoras on the acropolis. On the third day a truce was declared; the Spartans went home, and Cleisthenes returned. The following summer the Spartans came back, co-ordinating their attack with invasions of Attica from Chalcis and Boeotia. The Athenians are supposed to have defeated the Chalcidians and Boeotians in two battles on one day, and the Spartans went home again. 'When these things had been done', wrote Aristotle, 'the *politeia* was much more democratic than that of Solon' (*Constitution of Athens* 22.1).

This is the framework from which we begin. The literary sources are unsatisfactory for a narrative political history, and though philological historians have made some valuable contributions to our understanding of Greek society, in general the picture of developments before the mid-sixth century is indistinct. The textual record is unlikely to grow very substantially, and any understanding of Archaic Greece must stem largely from the archaeological data.

The living and the dead

When you're dead you're dead, and that's the end of you.
Baka informant quoted by Robert Dodd
(in Woodburn 1982, 195)

Happily for the archaeologist, this Cameroons hunter was not speaking for everyone. Very often, when you're dead that's anything but the end of you, and the material remains of the sometimes complex ceremonial surrounding death and the dead are one of our most fertile sources for ancient social systems. The interpretation of burials is a central concern for most archaeologists. It was a major theme in the rise of the New Archaeology in the 1960s, and in the 1980s some of the fiercest criticisms of the processual programme have focused on the analysis of graves.

The use of burial customs as evidence for racial differentiation or religious belief has been firmly rejected, not only on general grounds (Binford 1971, 23–5), but also in the specific case of Early Iron Age Greece (Snodgrass 1971, 143–7). Most archaeologists have in the last fifteen years concentrated on the social dimensions of funerary remains, but no universally accepted paradigm has emerged. O'Shea has stressed the absence of a central thread in burial studies (1984, 2–3), but concentration on site formation processes and quantitative methods alone will not provide one. Archaeologists must return to the theoretical bases of the subject, which are often taken for granted. We must reconsider such central questions as: what generalisations can we make about the relationships between society and burial? Why do these relationships exist, and under what circumstances will they fail to apply?

Rites of passage

As archaeologists, we excavate burials. But a burial is only part of a funeral, and a funeral only part of the social circumstances surrounding the biological fact of death. If we wish to understand the patterning of funerary evidence, we must begin at the highest level, and work from the general to the particular. Before considering the material evidence, we must ask whether it is possible to generalise about the social reactions of the living to death.

There is a long tradition of psychoanalytical studies of individual emotional responses to death (e.g. Freud 1960 [1913], 51–63; 1985 [1915], 77–89; Malinowski 1954 [1915]; Goody 1962, 28–30), but these are less interesting for the archaeologist than sociological studies. Gluckman (1937, 117; see also Huntington and Metcalf 1979, 23–58) stressed the extent to which social pressures tend to delimit and override purely personal factors

in funerary ritual: why, he asked, if burial customs are simply cathartic emotional props for the bereaved, are unloved parents buried with as much ceremony as loved ones?

The archaeologist observes differences within groups of roughly contemporary burials and changes in patterns of burial practices through time. While there may be scope for a palaeopsychological approach, the lines of inquiry followed here stem from the seminal works of Hertz (1960 [1907]) and Van Gennep (1960 [1909]). These were the first studies to treat death as a social as well as a biological transformation, and they share a conception of the funeral as a *rite of passage*, with a tripartite structure. The first stage of the process is the *rite of separation*. The participants, whom we may call the initiands, move out of their original social roles, into an altered, liminal state (the second stage: what Van Gennep called the *rite de marge*). That is, in a funeral, the survivors move from their former roles to being mourners, the deceased moves from being a person to a corpse, and the soul is separated from the body. The *rite de marge* places the initiands in an extraordinary position, and is frequently associated with pollution and/or reversal of roles, dress and behaviour. Finally, the initiands enter a new stable state through a *rite of aggregation*. The mourners return to social life, but without the deceased; the corpse is finally disposed of; and the soul may join those of the ancestors. Rites of passage usually accompany the major changes of status in life – birth, puberty, marriage and (of course) death.

Hertz is particularly important for his identification of three dramatic levels at which these three stages of ritual have to be enacted, performing different functions for the three actors in the funeral – the corpse, the soul and the survivors (Hertz 1960, 29). More precisely, Hertz focused on the three relationships established between the three different *pairs* of actors (Huntington and Metcalf 1979, 62).

For Hertz, death was perceived as an external force, striking in at society and shaking its very roots: the destruction of an individual was ‘tantamount to sacrilege’ (Hertz 1960, 77), posing serious problems for society as a whole. The corpse, the soul and the survivors were left in relationships different from those before the death occurred, and in order to ease all three into their new social statuses and to resolve the problems in their relationships, changes must be accomplished in each and equilibrium re-established over a period of time varying in length from a few moments to several years.

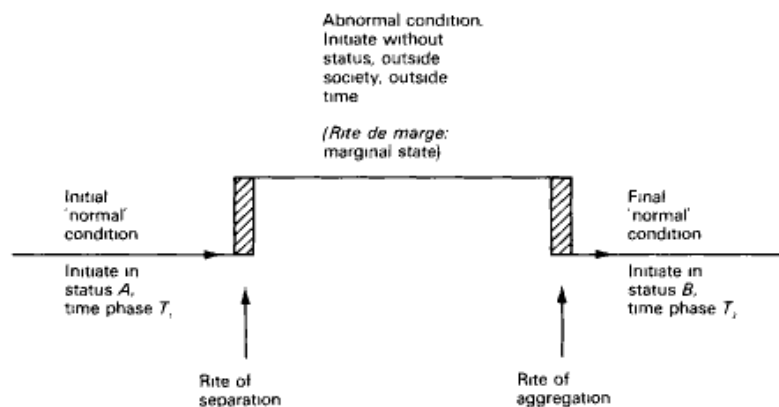


Fig.10 The tripartite structure of the rite of passage (from Leach 1976, fig.7)

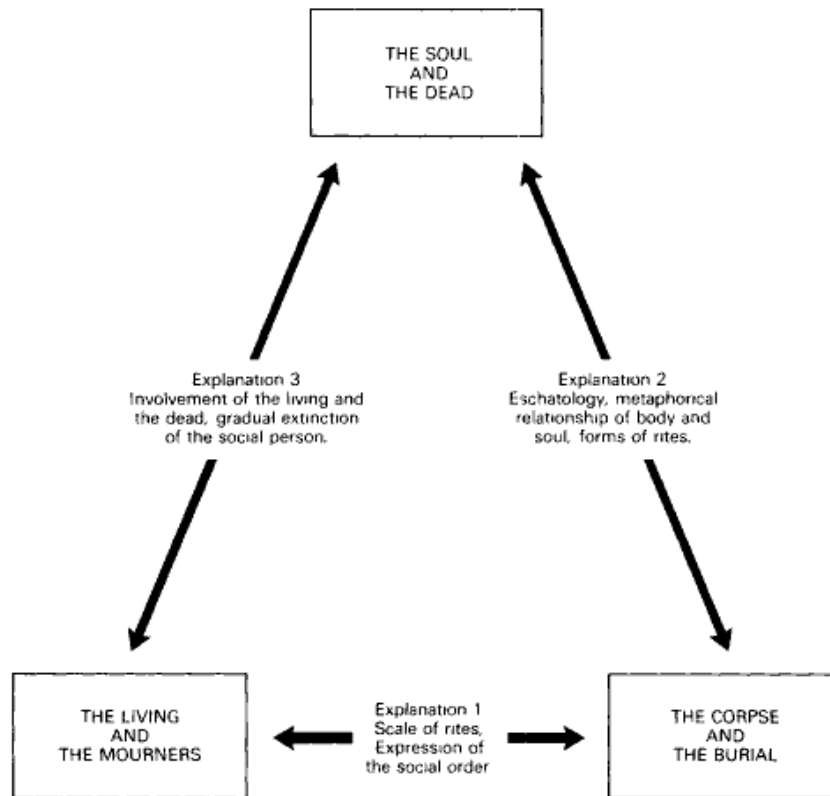


Fig.11 Schematic diagram of Hertz's model of the relationships between the participants in funerary rituals (from Huntington and Metcalf 1979, fig.2)

Hertz asserted that the rites of passage accomplish this, and it is these ceremonies which produce the material remains excavated by archaeologists.

The impact of the death of an individual on the survivors as a group can vary considerably according to the deceased's position within society, as can the scale and form of rites of separation necessary to effect his or her escape from this world. For the survivors, life goes on. Funerary ritual, as well as disposing of the corpse, allowing the release of individual emotions and marking a separation, must ultimately re-integrate the mourners with the rest of society, without the deceased, after a liminal period. Again, the scale and form of rites necessary to achieve this vary according to the position of the mourners and the dead person within the social structure (Hertz 1960, 29–30, 76). For Van Gennep, writing in 1909, this was already a truism (1960, 146).

One result of these ceremonies is the affirmation of the social order in the face of disorder. The affirmatory role of the funeral was stressed by Radcliffe-Brown:

The ceremonial (i.e. collective) expression of any sentiment serves both to maintain it at the requisite degree of intensity in the mind of the individual and to transmit it from one generation to another. Without such expressions the sentiments involved could not exist. (Radcliffe-Brown 1922, 234)

Radcliffe-Brown's functionalist enthusiasm is sometimes questionable, and Goody has suggested that in funerary ritual 'the reference is not to the reinforcing of social norms as

such, but to the controlled expression of forces that might tend to upset the social system from within' (1962, 35). The funeral is one occasion where the ideal norms of the social roles of the survivors and the dead are played out with the greatest clarity (see Goody 1962, 29; 1975, 5–6; and in a rather different way, Maurice Bloch 1977, 286–7). Classicists might note the advice given to women in the Periclean funeral oration in fifth-century Athens (Thucydides 2.45.2) and Polybius' comments on Roman funeral orations (6.53.1–54.5) as excellent examples of this.

So, something of the ideal social structure is captured in the funerary process, and it has the potential to enter the archaeological record through its material manifestations. On the one hand, the status of the deceased affects the scale of rites necessary to achieve separation; on the other hand, the re-integration of the mourners with the living requires restatement of the social structure and the relationships of the living to the dead (Hertz 1960, 77–8). It is this principle which lies behind the empirically observed variety in any society's funerary customs.

Hertz's second relationship is that between the corpse and the soul. The funerary process must cater for the separation of the soul from the body, usually immediately upon death, and then, generally after some time has elapsed, it must act as a ceremony marking the integration of the soul with those of the ancestors. It should be noted, however, that there is often some confusion and ambiguity over the separateness of these stages. Hertz made the very important point that the physical state of the corpse and the state of the soul are often closely linked (1960, 83). Only when the corpse reaches a stable physical form, whether through rotting or cremation, at the end of the process, does the soul become a fully fledged member of the afterworld. At this point, its ties with the living are severed.

The funeral therefore encompasses three stages in this relationship – the separation of the body and soul, a liminal stage where the soul is very much betwixt and between, and a post-liminal stage where it is incorporated into the society of the dead.

The third area in which the funeral operates is the relationship of the soul to the survivors. The separation of the soul from the world of the living is often a rather gradual process, over the period of the liminal stage in the second relationship described above, and hence closely linked with the physical state of the corpse. During this period, those who are close to the dead, either physically or through kinship, are themselves in a liminal, metaphysically polluted state. The funerary process thus has two extra functions here, beyond marking the separation of the soul from the body; the soul's ties with the living must be gradually diminished by the passage of time and the correct performance of rituals; and the end of the process marks the final release of the soul, and the re-integration of the living community, with the miasma surrounding the mourners being lifted (Hertz 1960, 62–4). The reaffirmation of the structure of society, which played such a large part in the first relationship, also has an important role here (Huntington and Metcalf 1979, 67).

Ideology and ideas of death

Hertz's view allows the possibility of generalising about the ritual structure behind burial remains. His essay has stood the test of time well and has been enormously

influential, although there are some difficulties. The main problem is Hertz's notion of a unified social organism responding to the irruption of the social as well as biological 'facts' of death, with the funeral as a sort of collective representation. Hertz was a leading light in the *Année Sociologique* school headed by Emile Durkheim, and, like other members of this group, he tended to reify the concept of society, which makes for certain misunderstandings. Goody suggested that Hertz's 'sacrilege' of death should be viewed from a slightly different angle: instead of the external force of death unbalancing the social body, he argued that death rituals stem from the contradiction between the relative perpetuity of the groups that constitute society and the impermanence of their members. Burial rituals and belief in the afterlife sanction the existence of these transgenerational groupings, and, as in Hertz's theory, rites vary in scale with the importance of the deceased and the threat posed to the group by his/her loss (Goody 1959; 1962, 27).

A similar theme has recently been developed by Maurice Bloch. In a series of studies, Bloch has argued that groups within society can use formalised language and ritual to legitimate their positions by creating through them an idealised and static social structure (e.g. 1977). Where authority is of the 'traditional' type – 'the type of authority which is represented as being a part of an eternal order grounded in nature and/or divinity' (Maurice Bloch 1982, 223) – the expression of participants' mutual rights and duties in rituals is seen as a central tool in supporting inequality. Death, he suggests, does not create the tripartite rite of passage structure of funeral ceremonies; rather, certain individuals use life crises, whether birth, puberty, marriage or death, to establish rituals which socialise other members of the group into accepting an unchanging order of dominance. He writes:

Most generally, therefore, funerary practices are central ideological practices in that they are based on the type of three-stage argument which characterises ideology: 1) they take over certain pre-cultural biological and psychological phenomena in order to represent them, in this case death, sorrow, pollution; 2) this *representation* then incorporates these phenomena so that they appear homogeneous with legitimate authority, the main manifestation of which is fertility; 3) authority is verified by appearing natural because on the one hand it incorporates the evident processes of biology and on the other it corresponds to deeply felt emotions. Ideology feeds on the horror of death by first emphasising it then replacing it by itself. (Maurice Bloch 1982, 227)

Where authority is not of the traditional type, death has a different impact and a different social manifestation, with the funeral playing a different role (Maurice Bloch 1982, 230; Bloch and Parry 1982, 42).

Two alternatives to traditional authority are suggested: groups where there is very little inequality to legitimise, and whose funerary practices are therefore very simple, and groups where authority is derived from an external source, and who do not need to use burial ritual to justify or disguise inequality (1982, 229–30).

Bloch perhaps pushes this last point too far. As Van Gennep noted (1960, 193), rite of passage funerals are not universal, but it is probably only within the peculiar historical

development of the modern West that this ritual structure has seriously declined. Bloch's classification of reactions to death by types of authority does not seem to be analytically useful. Woodburn, in a paper which Bloch draws on, presents accounts of the funerary rituals of four hunter-gatherer societies in sub-Saharan Africa. Their practices are certainly very simple indeed, but it seems to be pushing the data rather hard to argue that their funerary customs do not constitute a tripartite rite of passage. Woodburn suggests that the simplicity of practices is a consequence of immediate return economic systems; interestingly, it is only among the !Kung, who have some significant long-term relationships in the *hxaro* exchanges, that the spirits of the dead have an important role (Woodburn 1982, 207).

This extreme simplicity is not the same as the absence of the rite of passage structure, and it seems to be explicable within a more traditional framework. Goody has suggested that

the extent of ceremonial performed at rites of passage in the individual's life cycle is positively correlated with the amount of work (in terms of the handing over of rights and duties, etc.) that has to be done. Where marriage establishes a conjugal fund (as in dowry systems) the wedding ceremonial will be more elaborate than where it does not; where funerals redistribute the dead man's property, they will be more elaborate than where a holder divests himself of his property during his lifetime. (Goody 1976, 9)

There is some evidence available for an increase in the complexity of funerary behaviour and in the formality of the treatment of the dead going hand in hand with greater emphasis on land ownership and inter-generational transmission of vital resources. This was observed among the Mae Enga of Papua New Guinea (Meggitt 1965) and the Mbeere of central Kenya (Glazier 1984). In neither case was there any suggestion of a change in the ritual structure of the funerals; simply that as the elements underlying Bloch's traditional authority become stronger, the *already existing* ritual structure becomes more pronounced.

Bloch's other category of authority, the non-traditional, is exceptionally wide. He suggests that both the Nuer and the modern West emphasise only separation in funerary ritual. This is traced to the Nuer reliance on an extra-human God as a source of authority, and the Europeans' derivation of legitimacy from their own God and/or disembodied capital.

The Nuer, however, seem to have had a classic rite of passage structure to their funerals during Evans-Pritchard's visits in 1930–6. Following a simple inhumation, there came a four to six month liminal period of mourning, with the duration and intensity of pollution determined by kinship distance and the social status of the deceased. This mourning period ended with the *wocene cuol* or *cuol woc*, a typical ceremony of reintegration (Evans-Pritchard 1956, 144–53).

Nuer funerary behaviour has very little in common with that of western Europe and North America. In the latter cases, it does indeed seem that the rite of passage structure of the funeral is breaking down (Huntington and Metcalf 1979, 184–211; Palgi and Abramovich 1984, 406–13). It was presumably western Europe to which Van Gennep

referred when he said that in some societies only rites of separation are prominent. Both the Nuer and the West have their own long histories, and the two have been very different. Over the last millennium there has been a complex evolution in Western attitudes to death. The great, if eclectic, French historian Philippe Ariès characterises five stages, in a roughly diachronic process (Ariès 1974; 1981):

1. *The Tame Death*. In this model, death is treated with familiarity, and while it may be feared, its inevitability is accepted. Ariès presents this as a basic, almost 'natural' attitude to death, which was 'almost unchanged for thousands of years . . . a naive and spontaneous acceptance of destiny and nature' (1981, 29).

2. *The Death of the Self*. In the eleventh or twelfth centuries AD, a new attitude began to appear among intellectuals, with a greater emphasis on individuality, and death as a hateful, personal doom – 'death ceased to be a weighing, a final reckoning, judgement or repose, and became carrion and corruption; it ceased to be the end of life, the last breath, and became physical death, suffering, and decomposition' (1981, 138).

3. *Remote and Imminent Death*. By the end of the sixteenth century, the angry medieval attitude towards death had begun to decline; death was becoming at once more remote – discrete, and distanced from everyday life – and more imminent, with the rise of the modern Western family ideal. This is a complex stage, and not all historians are agreed on its validity.

4. *The Death of the Other*. By the mid-eighteenth century, intellectual romanticism was transforming the deathbed into a scene of beauty, and, as the nuclear family grew in importance, attention began to focus more on the survivors than the deceased.

5. *The Invisible Death*. The final stage is twentieth-century death, alienated from the world of the living, and sanitised in hospitals and funerary parlours. Death is denied; it has become an obscenity, something which should not be mentioned in polite company, and which should be hidden from children. Ariès seems to be suggesting that death should be re-humanised, but like so much else in his monumental study, this is only hinted at, and is never made explicit.

Ariès held that all societies outside the influence of this Western system have shared the Tame Death. It is within the Tame Death that Hertz's and Van Gennep's studies of the funeral as a rite of passage operate. The tripartite structure of the funeral and the Tame Death acceptance seem inextricably interwoven. When the Tame Death declines and the reactions of the survivors to death begin to change, the ritual form of the funeral changes with it, perhaps irrespective of the nature of authority (although since the only example of a pristine shift in death models is western Europe, this can hardly be verified).

Ariès' scheme is certainly rather vague and loose: it is frequently criticised for its impressionistic and intuitive basis (e.g. Vovelle 1976; Whaley 1981; McManners 1981a), and Stone has suggested that the first move away from the Tame Death came only in the sixteenth century (Stone 1981, 242–59). It is clear, though, that a fundamental change in attitudes occurred in the eighteenth century, both in western Europe (McManners 1981b) and in North America (Stannard 1977). It is here, I suggest, that we will find the seeds of the dissolution of the rite of passage funeral.

Ariès' own idealist position is not an appealing one. Many historians have argued that demography is a prime mover in attitudes to death (e.g. Lebrun 1971; Chaunu 1976; Macfarlane 1981). If so, we should not expect any significant deviation from the rite of passage funeral structure in any prehistoric, pre-demographic transition society.

The Tame Death is of course a very loose category, and can accommodate a wide range of attitudes: saying that this model of death was and is universal outside the Western sphere of influence in no way diminishes the variety of attitudes recorded by historians, anthropologists and psychologists. Any one person can be expected to manifest a wide range of attitudes, sometimes self-contradictory, towards death (Hinton 1967, 21–49). My argument here is that in those societies where the Tame Death prevails, we will find rite of passage funerals; while it is only in the West since the eighteenth century, where historical development has been radically different, that the Tame Death and the rite of passage funeral have been displaced. The archaeologist is justified in treating the ritual structures behind the burial record as constant.

The archaeology of death

Information sources

While it is possible to make these generalisations about ritual forms, we must not lose sight of the fact that archaeologists excavate burials and not whole funerals. Archaeological remains of course provide at best but a pale shadow of past funerary activity. The differences in rites dictated by the different social identities attributed to the deceased have great potential for entering the archaeological record through their material expression, though the extent to which this happens in practice depends on the particular forms the symbolism takes, and is largely culture specific. Tainter (1978, 120–1) shows the way in which archaeologically invisible forms of symbolism can cause serious misunderstandings. When we come to interpret the funerary remains, we might construct a hierarchy of information sources based on that suggested by Renfrew for cult behaviour:

- 1 Verbal testimony, whether oral or written, relating to the funerary practices of the community, or elucidating the meaning ascribed to them;
 - 2 Direct observation of funerary practices;
 - 3 Study of non-verbal records, usually depictions, portraying either
(a) eschatological themes, or (b) the funerary practices carried out;
 - 4 Study of the material remains of the funerary activities themselves.
- (After Renfrew 1985, 12)

In the study of Greek burials, we are particularly fortunate in having a small amount of evidence from the first class from c.750 BC onwards, elucidating some of the meanings ascribed to funerary behaviour, which, while not always directly relevant to the particular forms of Athenian symbolism, allows us to establish some consistency in attitudes through time. The question of consistency is a major one; the possibility that there might have been changes through time in the 'visibility' of funerary symbolism is particularly worrying. As Pader points out (1982, 42) different societies emphasise dif-

ferent parts of the funeral, and while the burial must make sense in terms of the rest of the ritual, we cannot just assume that its symbolic role remains constant through time and space. If studies of burial on a long time scale are to be useful, it must be demonstrated from sources of classes 1 to 3 that there was continuity in attitudes, and that archaeologically invisible expressions were paralleled by functionally redundant but archaeologically visible symbolism. There are no sources of class 2 available, but the iconographic evidence of class 3 perhaps implies some continuity from at least 850 down to 500 BC, and probably from c.1000 BC onwards. Unfortunately the earlier Dark Age, c.1100–1000 BC, is truly dark, and only class 4 sources are available. The assumption of similar attitudes for the eleventh century cannot be supported empirically.

For most of the period under study, the consistent relevance of general theories of the interpretation of burials can be tested against these independent primary sources, giving a measure of confidence often lacking in prehistoric contexts. The importance of this evidence cannot be overestimated. Its use allows us to sidestep some of the uniformitarian assumptions about prestige and conspicuous consumption criticised by Binford (1982, 162). The evidence will be discussed in some detail in Chapter 3.

From the burial to the funeral

In the last twenty years, archaeologists have recognised that the rites concerned with Hertz's first relationship have the greatest potential to enter the material record, and have accordingly concentrated on the interpretation of the scale of ceremonies as an indication of social hierarchy and ranking.

Arthur Saxe, drawing on Goodenough's use of role theory and implicitly on the works of Gluckman, Goody and others, looked at the idea of the funeral as an occasion when a selection of the various social identities held by the deceased among the living, the *social persona*, will be given symbolic recognition (Saxe 1970, 6). The social persona is in fact almost identical to what Radcliffe-Brown, in his discussion of Andamanese funerals, called the 'social personality' (1922, 285–96), although Saxe does not acknowledge this. The social persona can consist of any or all the identities the individual assumed in everyday social intercourse, and the choice of roles to be given signification in the funeral is determined by the society's organisational principles (Saxe 1970, 7). These social personae should be archaeologically visible, and Saxe suggested the potential of this in a series of eight hypotheses. These were tested on an ethnographic sample of three societies, with results which Saxe found quite satisfactory (1970, 225–35).

One of the most important contributions to this area of archaeological theory has been made by Lewis Binford, who traced his position back to Hertz (1971, 7). Binford pointed to the very common occurrence of differential treatment of the dead according to status within a single society, and drew what is after all only the logical conclusion of Hertz's work:

there should be a high degree of isomorphism between (a) the complexity of the status structure in a sociocultural system and (b) the complexity of mortuary ceremonialism as regards differential treatment of persons occupying different status positions. (Binford 1971, 18)

The value of Binford's perspective has been amply borne out in the substantive results of prehistorians' studies, and others have added various refinements to his and Saxe's work. However, there have been dissenters. Even the most sceptical anthropological archaeologists have accepted the basic principle of the funeral as a rite of passage, and the theoretical possibility of social reconstruction (e.g. Ucko 1969, 270); but Binford has been sharply criticised for the cross-cultural test which he applied to his arguments, the archaeological utility of his position, and the apparent naïveté of his view of ritual.

Binford's cross-cultural test

Binford tested his model on a sample of forty non-state societies (1971, 18–23), with, he felt, encouraging results. Hodder (1982a, 201) observes that it is not clear how Binford derived his sample, and that its status as a test for his generalisation depends on the 'generally accepted correlation between forms of subsistence production and societal complexity' (Binford 1971, 18). This has been challenged by his critics, but Binford is correct that this correlation *is* generally accepted, and it forms the basis of all historical materialist thinking. It is a probabilistic rule, and a few contrary cases do not overturn its general validity for a wide-ranging cross-cultural test.

O'Shea (1984, 5–8) criticises Binford's test as poorly conceived, and suggests that the use of sedentism as a factor unduly complicates matters. Binford's test seems not to suggest a simple one-to-one correlation between mortuary differentiation and subsistence or social organisation, but O'Shea accepts that the former is dependent on the latter factors. Finally, he notes that Binford's suggestion of a shift away from age and sex as primary features of the social persona in complex societies receives no support. This is hardly surprising (see La Fontaine 1978); as will be seen in Chapter 4, both age and sex were important in the social personae recognised in Iron Age Athenian burial.

Archaeological utility

A second criticism is that whatever the ethnographic situation, the archaeologist may not be able to use Binford's proposals. This criticism concentrates on the problem of changes between the funeral and the excavation, which may render cross-cultural generalisations inappropriate. The transformations may to some extent be predictable (O'Shea 1984, 302), but often, as pointed out above, in the absence of evidence from classes 1 to 3 the specific forms of symbolism may be such as to frustrate the 'Binford approach'.

Burial rituals

The major criticism of Binford's position is that the symbolic representation that takes place at the funeral may not be a direct or unambiguous one. Hodder argues that

burial ritual is not a passive reflection of other aspects of life. It is meaningfully constructed and our cross-cultural generalisations must take the ideational and ideological into account. (Hodder 1982b, 141)

That is, material culture patterning does not constitute a mirror image of social organisation. The relationships between individuals may be reinterpreted when one of

them dies – ‘In death people often become what they have not been in life’ (Hodder 1982b, 146).

The funeral, as we saw above, affirms order in the face of disorder, but the order affirmed need not be the same as that which members of the society follow in everyday life. That is, the roles and relationships enacted in the rituals and detected by the archaeologist may not so much mirror real life relationships as distort them. This view of funerary ritual is of course implicit in Goody’s and Bloch’s accounts, and brings us back to some of the same questions.

The most valuable discussion is Ellen-Jane Pader’s (1982), drawing on Giddens’ (1984) concepts of *structuration* and the *duality of structures*. Giddens’ approach to society may be open to a number of criticisms (see J.B. Thompson 1984, 48–72), but is a very useful framework for the archaeologist. The analytical position outlined by Pader can perhaps ultimately be traced back to the classic anthropological distinction between *social structure* and *social organisation*. Organisation is taken to mean the empirical distribution of relationships in everyday experience, while structure is an ideal model, a mental template, of the relative placings of individuals within the world. This structure is created in the socialisation process, and in practice largely through rituals, such as the funeral. Edmund Leach has explained the principle most clearly.

The structure which is symbolised in ritual is the system of socially approved ‘proper’ relations between individuals and groups. These relations are not formally recognised at all times. When men are engaged in practical activities in satisfaction of what Malinowski called ‘the basic needs’, the implications of structural relationships may be neglected altogether; a Kachin chief works in his field side by side with his meanest serf. Indeed I am prepared to argue that this neglect of formal structure is essential if ordinary informal social activities are to be pursued at all.

Nevertheless if anarchy is to be avoided, the individuals who make up a society must from time to time be reminded, at least in symbol, of the underlying order that is supposed to guide their social activities. Ritual performances have this function for the participating group as a whole; they momentarily make explicit what is otherwise a fiction.
(Leach 1954, 15–16)

The structure of society as enacted in ritual is not necessarily the same as the organisation of society in practical social action, and indeed can perhaps never be so (Pader 1982, 54). Empirical relationships of authority may be denied, reflected or exaggerated in the social structure, and some groups within society might stress their status through lavish rites, while other groups understate theirs. If we are to interrogate burial evidence about ancient society, we must ask questions concerning *social structure*.

The organisation/structure distinction helps us understand the disagreements between the Binford/Saxe and Hodderian approaches to burial. The debate has sometimes been sharp (e.g. Binford 1983, 17–18; Hodder 1985, 18–22), and there is a deep theoretical divide which makes a synthesis difficult (Patrik 1985, 55). The clash over burials nevertheless seems to be one of emphasis rather than of content, in spite of its important

consequences. Both schools of thought accept that the funeral is a rite of passage; the issue centres on role theory and the formation of the social persona. Saxe (1970, 9) and Binford (1971, 21) stress that the social persona consists of the social identities of the deceased to which the living choose to attach the greatest importance, but seem to go on to assume that social structure and organisation will be the same. Binford perhaps foresaw some of the problems when he wrote

other things being equal, the heterogeneity in mortuary practices which is characteristic of a single sociocultural unit would vary directly with the complexity of the status hierarchy, as well as with the complexity of the overall organization of the society.
(1971, 14–15; emphasis added)

but he offered no alternative approaches. Similarly, Saxe noted the possibility of ‘egalitarian ideology flying in the face of social fact’ (1970, 235) but seems to have thought it a relatively minor problem. It is abundantly clear, though, that ideal roles and actual behaviour patterns are two very different things.

The main contribution of Pader’s approach is a more realistic view of the complexity of the formation and meaning of social personae, and their historical specificity, rather than the rejection of role theory *per se*. Parker Pearson seems to be denying its relevance for mortuary studies, but his ‘theoretical stance that social systems are not constituted of roles but *by* recurrent social practices’ (1982, 100) can be met simply with the observation that in burial archaeology we study not a social system but a ritual expression of social structure, which *is* constituted largely in terms of roles. Cross-cultural generalisations cannot be made about the roles played in funerary rituals. The subsistence strategy might influence the elements given prominence in the social persona, just as Binford argued, but the relationship is not a direct one. The weight attached to age, sex, wealth, religion, colour, birth, or any other quality depends on the particular social structure. For example, in fifth-century BC Athens, Thucydides puts into Pericles’ mouth the claim that death in battle on behalf of the polis formed such a large part of the social persona that it blocked out all other considerations (2.42.3).

The argument is that the general relationships between society and burial – particularly when supported by primary literary evidence – allow the archaeologist to work back from burials to society. But the aspect of a living society illuminated by burials is the social structure, rather than social organisation and ‘complexity’. The citizen estate, that central feature of the social structure of the polis, should then be open to study through the evidence of burials.

However, some points remain to be cleared up. Leach’s use of social structure, drawn on heavily here, has been severely criticised by Maurice Bloch (1977, 280–1) and Asad (1979, 613–16). Bloch accused Leach of setting up social structure as the generator of all individuals’ categories of discourse, so that criticism could be carried out only within the terms of the existing social structure; therefore, Bloch argued, Leach’s work was unable to explain structural change through time. Bloch proposed that we should replace this and other ideas of social structure with a view of human cognition as double: one level

generated through social structure in the form of rituals, politeness formulae, etc., acting to disguise the real relations of power; and a second level generated through contact with the external reality of nature, acting to expose the ideological nature of social structure, and providing the possibility of structural change.

Bloch's argument has itself been challenged (Bourdillon 1978), and Asad (1979, 611–13) has argued that the mistake of the anthropologist (to which we may add the historian and the archaeologist) has been to imagine that it is possible to recreate through an academic text the unified system of thought and experience of any social group. Like Bloch, he criticises Leach for establishing a Kachin ideology which prevents the actors from generating new notions of social structure.

It is debatable how far these criticisms of Leach are justified, but they do raise the question of just what we see social structure or ideology doing in society. Most modern sociological schools adhere to some version of the 'dominant ideology thesis', where it is assumed that a society can be characterised by a particular world view, generally that of the economically dominant class. For functionalists, the dominant ideology is the glue which holds society together; while for many neo-Marxists, ideology plays the same role, but in the more sinister fashion of disguising exploitation and conflict (Abercrombie, Hill and Turner 1980, 7–58). It is a moot point whether ideology really plays such a vital role in maintaining the functioning of society and the stability of inequality. Abercrombie, Hill and Turner argue that the ideologies have little effect beyond binding together particular interest groups, and Asad suggests that ideology can only authorise further ritual action in the same vein, without itself determining people's structures of thought (1979, 621).

Archaeologists too have been critical of simple notions of ideology as a straitjacket on thought and acting only as a tool of legitimation (e.g. Conrad and Demarest 1984, 205–26; Miller and Tilley 1984a), and Hodder chose to avoid the word ideology altogether in his recent summary of the contextual approach (1985, 9). The notion of social structure pursued here is not so rigid as the version attacked by Bloch and Asad. Structure is seen as prior to the individual in that everyone is born into a living society with its own long history. Everyone operates within a social structure, but in the process of doing so contributes to its transformation. As Pader emphasises (1982, 16), the roles created in social structure are *typifications*; their boundaries are not static, and they at once constrain and enable behaviour. The usefulness of role theory and this notion of social structure will then vary according to the sorts of questions being asked (Pader 1982, 56). The rise of the polis was the rise of a radically new type of social structure, and role theory will play an important part in its study.

Attempts to go beyond the archaeological evidence for social structure to detect competing ideologies or Habermas-type legitimation crises, while very stimulating, leave an uneasy gap between the social theory and the archaeological data. Even with the aid of literary sources, ideology is a problem. It has been well-nigh impossible for Greek historians to discover competing counter-ideologies (Austin and Vidal-Naquet 1977, 15–16; Ste Croix 1981, 441; but see also Finley 1983, 122–41). Archaeologists are not alone in the coarse grain of their evidential base. Even mature ideologies are multi-layered, and difficult to grasp. Ideological shifts are extraordinarily complex affairs, as revealed, for

example, in Ariès' account of the intellectual movements in eighteenth-century France underlying both the revolution of 1789 and the changes in the organisation of cemeteries (Ariès 1981, 475–556). The archaeologist can never hope for more than a rather high level abstraction, particularly of the part ideology plays in structuring any specific ancient society.

One example of the level at which the archaeologist is constrained to work is what we might call the 'stress hypothesis' of the interpretation of burials. Childe suggested that increased consumption in burial ritual is linked to social instability, whereas 'in a stable society the gravegoods tend to grow relatively and even absolutely poorer as time goes on' (1945, 17). This idea has been taken further by Mike Parker Pearson (1982, 112; 1984a,b) in his analysis of cycles of crises in the Danish Iron Age.

It has been suggested that changes in the form of the material symbols by which social groups define themselves may be the results of pressures on the group, or the desire to emulate another group. As pressures within the group grow, we expect to find increases in the scale of consumption within the terms of the given symbolic order; as pressures from outside build up, material symbols may be changed to preserve boundaries, in what has been called a 'style war' (Hodder 1979; 1982a, 191–4; 1982b, 203). A similar model is implicitly used by Oswyn Murray, deriving originally from Jeanmaire, suggesting that following the establishment of citizen armies in the poleis in the seventh century, the nobility were no longer able to define themselves as a group through a military role, and instead developed a distinctly aristocratic way of life based around sport and paederasty (Murray 1980, 193). Danny Miller's use of this idea to account for changes in pottery styles (1985) has been mentioned in Chapter 1.

The forms 'stress' might take in a given situation have been left very vague. This is a necessary evil; economic and social stress may arise in many ways and operate at many levels (Hodder 1979). Leach's criticism (1979, 121) that the category of stress is 'highly abstract' is undeniable, but its value (at least at a very general level) is not any the less for that. The archaeological remains of ritual behaviour can then be used to understand ancient social structures. In the absence of literary sources (and often even in their presence) there are no general laws which allow prediction of the ideological functions of social structure.

Other classes of archaeological evidence may allow us to compare social structure and organisation, and to suggest explanations for the form of structures and for structural change, but again the limits must be borne in mind. The fuzziness of some contextual studies can be rather disturbing. When dealing with Early Iron Age Greece, the literary sources and later developments allow the analysis to be placed on a much firmer basis; but even so, it is questionable how far we can claim to see ideologies at work.

Conclusion

The first step in using the funerary evidence has been made, and theories of the general relationships between burials and society have been put forward. We have seen that funerals in most societies are tripartite, rite of passage affairs, where roles and social personae are attached to all the initiands, and are given symbolic recognition. While society certainly does not react as a living entity to death, neither is the funerary process simply

a way to legitimise inequalities. Instead, it has been suggested that funerals help to create an ideal social structure, which constrains and gives meaning to action without determining it. At least in principle, burial evidence might be questioned about social structure, the way the members of a community were supposed to see themselves. Again, in principle, the archaeologist can hope to be able to follow the development of structures through time, and to identify points of structural revolution. In practice, of course, much will depend on the particular forms of symbolism employed, and their susceptibility to observation and interpretation.

The next step is to consider the sources specific to Early Iron Age Greece.

The social dimensions of early Greek burial

As we would expect, ancient Greek authors describe funerals as tripartite, rite of passage ceremonies. Robert Garland has presented the accounts of separation, liminality and reintegration from Homer to Plato in some detail (1985, 13, 21–76), and there is no need to go over the same ground here. Instead, I will consider the literary evidence relating to some of the particularly archaeological problems raised in Chapter 2. I intend to show that the scale and form of funerary rites were always assumed to be an index of social status, and that lavish burial was the sign of the *agathos*, bringing with it admiration and pride. Further, it will be seen that the rites usually took both archaeologically visible and invisible forms. In the second part of the chapter, I will argue that the Greeks explicitly linked the spatial organisation of cemeteries with the membership of the corporate group and with landholding, and that the exclusion of groups from the formal cemeteries, on the basis of age and rank, constituted a powerful statement about the ideal structure of the community.

The literary sources

Most of the authors used in this chapter are primary sources, living in the period c.750–500 BC. The earliest texts, the *Iliad* and the *Odyssey*, are particularly informative about attitudes to burial, although their use is controversial. From the early seventh century we have Hesiod's *Works and Days* and *Theogony*, both long complete poems, but neither is so concerned with death as was Homer.

After Hesiod, the evidence is less full. A number of seventh- and sixth-century poets are known only from quotations in the writings of later authors or from fragments of their works found on Egyptian papyri. The only complete collection is the 1,400-line *Theognidea*. Theognis was a Megarian poet probably active in the mid-sixth century BC (according to the tenth-century AD Byzantine lexicon *Suda*), but it is clear that not all the poems in this collection are by the same man. He was frequently quoted by Xenophon, Plato and Aristotle in the fourth century BC, but all their quotations come from the first one-third of our text, whereas in later antiquity references are made to all parts of it. It is likely that a collection was made, perhaps in the third century BC, and a number of earlier and later poems have been transmitted along with Theognis' own works.

In all cases in this chapter, the literary texts are studied as 'unintended evidence'. That is, they are scrutinised not for what their authors wished to say, but for the unarticulated assumptions they carry with them: assumptions about the premises of the actors and the conditions for action lying behind funerary activity. No early Greek

author sets out to explain for us the meaning of the scale and form of funerary rites; and if one had done so, we might have reason to suspect something was amiss, and to question the value of the passage.

The need to use 'unintended evidence' is most glaringly apparent with Homer. Although written down in the eighth century, the *Iliad* and *Odyssey* are set in the Heroic Age, generally assumed by modern scholars to be the Mycenaean period. The pathbreaking work of Milman Parry (1971) and Albert Lord (1960) established beyond any reasonable doubt that the poems were orally composed. Due to misunderstandings of the nature of oral poetry, Classical scholars have argued that the social and economic basis of the worlds in the poems were derived from just about every period between the thirteenth and eighth centuries BC, or even consist of a conflation of elements drawn from many periods. It is widely assumed that an 'oral tradition' spanned many generations, allowing the faithful transmission not only of stories and names but also of vanished institutions and conditions of action.

I have argued at length elsewhere that the poems are a version of eighth-century social structure, drawn from one particular reactionary and aristocratic viewpoint (I. Morris 1986a; also J.M. Redfield 1975). The comparative study of oral poetry makes it very likely that the societies of the poems will be based upon those in which the bard and his audiences lived, although they will not be a *direct* representation (see Goody 1977; Finnegan 1977; Vansina 1985).

For many purposes Homer is little use to the historian, but the unintended evidence in the poems is of priceless worth for the eighth century. The details of Homeric burial practices, those data which the poet intended to communicate, are not of great interest here. No exact parallels for the heroic cremations have been found, and imagination and exaggeration probably formed most of the picture. The only closely similar burials are the early seventh-century royal tombs at Salamis in Cyprus, but these were probably influenced by the epic, rather than the reverse.

While the realms of ideas and institutions must derive from Homer's own world, the sphere of material practices may – indeed, in epic, must – include elements of archaism and fantasy. Jack Goody draws a sharp distinction between what he calls 'informations auditives' and 'situations totales' (1977, 37). The 'total situation' is described as an element of a poem which has an external *visual* referent, such as an actual place to which the poet can refer, a road which can be walked, or a practice which can be understood in contemporary terms or emulated. In these situations, oral poets can achieve a certain amount of freedom from the society they live in. In Homer's day, Mycenae was a rather unprepossessing settlement, but 'Mycenae rich in gold' was a concept which nevertheless had present meaning for the audience. Similarly, a bard could recount a heroic cremation, even if such burial practices were no longer current, or never had been: poet and listeners alike could conceptualise an idea expressed in comprehensible, visible, material terms. Goody's second class of situations, those without a material referent in the living world, constitute a very different group of elements. Homer did not tell his audiences about Mycenaean palaces functioning as redistributive centres, with professional scribes using syllabic scripts. Vanished social institutions with no present referent can mean nothing, and these features rapidly disappear from constantly evol-

ing oral poetic traditions, just as fast as they disappear from everyday life (see I. Morris 1986a).

It is not the actual burial customs in Homer which we should note, but the attitudes to death and burial which the poet and his audiences took for granted. In the poems, the scale of funerary rites was considered a very overt statement about the social status of the deceased, and whenever such statements were made there was a great deal of redundancy in the symbolism.

Death and burial in early Greece

Homer is the obvious starting point. At Troy, the rank and file soldiers were cremated (*Iliad* 1.52; 7.417–32, although Page (1959, 315–32) suggested that the latter passage is a fourth-century BC interpolation), as were the noble leaders, the *basileis*; but the funerals of the *basileis* were far more lavish. Some of the symbolism was invisible – the laying-out ceremony, varying in length with the deceased's status (an incredible seventeen days for Achilles: *Odyssey* 24.63–6); the great laments (*Iliad* 18.25–35; 19.282–302; *Odyssey* 24.45–64); Andromache's burning of Hector's clothes, which she called 'Your *kleos*' (literally, 'fame': see J.M. Redfield 1975, 31–3) 'for the Trojan men and women' (*Iliad* 22.514); and the gift giving at funeral games (*Iliad* 23.249ff.; *Odyssey* 24.85–92. In lines 90–2, the scale of gifts is linked to Achilles' dearness to the gods). These features were paralleled by archaeologically visible behaviour. A main dimension of expression of status was the mound over the grave. This was linked to glory in two ways: the dead man's honour, *timē*, made a great mound part of his due (*Iliad* 16.457, 671–5; 23.44–7; *Odyssey* 1.239–40; 14.366–71; 24.188–90), and having a great mound was a further source of *kleos*, or fame, and hence grounds for renewed *timē* for his descendants (*Iliad* 7.79–86; 23.245–8; *Odyssey* 5.311; 14.366–71 (cf. 24.32–3); 24.93–5). The size of the mound of an enemy killed in battle was a further indirect augment to a hero's *kleos*, the victor having showed that his own *timē* was even greater than that of the hero who had himself deserved such a great mound (*Iliad* 7.87–91; cf. 6.416–19).

The size of the mound was directly determined by *timē*. Achilles asked the Achaeans not to raise a huge mound for Patroclus, since his ashes were not to be finally buried immediately, but rather 'something just' for the time being (*Iliad* 23.246). Later, though, they must build a mound that was wide and tall (23.247). Achilles and Patroclus were buried together under such a mound in a golden urn (*Iliad* 23.243; *Odyssey* 24.73–5), an honour otherwise reserved for Hector (*Iliad* 24.795). For Agamemnon, the whole Achaean host would have worked together to raise a mound (*Odyssey* 24.32). On the other hand, the funerals of the lesser heroes Eetion (*Iliad* 6.416–19) and Elpenor (*Odyssey* 12.8–15) were far more modest.

Patroclus' funeral also included lavish sacrifices on the pyre (*Iliad* 23.266–83), which was itself huge (23.164–5). Pyres were also graded in size, with energy expenditure determined by status. It took nine days to collect the wood for Hector's pyre (*Iliad* 24.784), while a single day sufficed to gather the corpses of the masses slaughtered in *Iliad* books 2–7, to collect the fuel, and to complete the cremation (*Iliad* 7.417–32).

At the other extreme, the worst thing that could happen was to be denied burial (*Iliad* 11.432–5; 15.348–51; 21.122–7; 22.96–9, 335–54, 508–11; 23.182–3; *Odyssey* 3.258–61).

The theme of the 'antifuneral' has been brilliantly treated by James Redfield (1975, 167–223) and Vernant (1981; 1982). Non-burial was a total denial of status, and lay behind the battles over the corpses of Sarpedon (*Iliad* 16.492–675), Patroclus (*Iliad* 17.498–547) and Achilles (*Odyssey* 24.36–42). Bloch has argued that these battles provide evidence for the ideological functions of the funeral in Homer; the funerary process re-presented society as pure and unblemished, in a perpetual youthful bloom through the preservation of the beautiful corpse, and its subsequent reduction to a permanent state via cremation (Maurice Bloch 1982, 228–9).

Burial had many psychological functions in Homer (see Garland 1982), but considerations of status bulked large among them. The non-burial of twelve Trojans sacrificed on Patroclus' tomb is significant here. These human sacrifices were the culmination of a spectacular occasion of consumption in the funeral of a very important man, and were seen as 'evil deeds' (*Iliad* 23.176) only because they went beyond the bounds of what was fitting in the funeral – the 'something just' mentioned by Achilles (*Iliad* 23.246). It is important to note that while it was unthinkable for Patroclus not to have a tomb, it mattered little that the twelve Trojans were left unburied (Schnapp-Gourbeillon 1982). The Trojans were noble youths, but the difference between their status as outsiders and Patroclus' was sufficient to render them sacrificeable objects, at least in Achilles' eyes (*Iliad* 23.23).

Grave goods feature less prominently than the grave marker as status symbols in Homeric funerals, but were still a powerful expression. It is usual for the form of grave goods to be linked to the perceived needs of the dead in the next world, and this is the case in Homer (*Iliad* 23.50–1; cf. Herodotus 5.92.7). It is clear, though, that the grave goods served as a medium for statements about the wealth and rank of the deceased. Laertes' shroud might well not survive in most Greek soils, but it is a useful indicator of attitudes. Penelope claimed it would be unfitting for one who had won such great possessions to be buried without a finely embroidered winding sheet (*Odyssey* 19.141–7, = 24.131–7). What we should note in this story is not that Penelope constantly unwound the web, but that the suitors were supposed to have had no suspicions when she spent three years on the task (*Odyssey* 19.148–55). The parallel use of gold urns has already been commented on.

Gisela Wickert-Micknat (1982, 18–19) recently suggested that there was a move away from large elaborate funerals in the *Odyssey*. Her case does not seem strong, based as it is on the members of the extended family who attended funerals, but it is certainly clear that in both poems the scale of the rites was linked to status, and when a lavish funeral did occur, it was intended to advertise a *basileus* and his descendants.

After Homer we are less well informed, but there does not seem to have been any significant swing in attitudes or behaviour. Hesiod makes a few direct statements. He mentions the funeral games of Amphidamas at Chalcis (*Works and Days* 654), who was described much later as *basileus* of Euboea (*Contest of Homer and Hesiod* 315; Plutarch, *Moralia* 153 E–F), but almost certainly motivated by the same attitudes as seen in Homer. His description of a funeral as *dusphēmoio*, 'ill-omened' (*Works and Days* 735), seems to imply the role of mourning (see West 1978, 337), but his other references to funerals and death have no bearing on this question. Interestingly, an early seventh-

century bronze found at Thebes, not far from Hesiod's home town of Ascra, bore an inscription saying it had been won in funeral games (Jeffery 1961, 94, no.2).

A little later, Callinus of Ephesus wrote of death in battle; this form of achieved status led to the fallen warrior being bewailed by the whole polis, he claims, with the small and the great alike joining in (West 1972, fr. 1). This is of course only a direct statement about archaeologically invisible symbolism, but speaks clearly on attitudes.

Tyrtaeus, a Spartan poet of the mid-seventh century, wrote of the compulsion of the helots (serfs) to mourn for their masters and mistresses at their funerals, again directly linking status with funerary rites (West 1972, fr. 7). A late tradition says that in the eighth century the Megarians had to mourn at the funerals of the Bacchiad aristocrats of Corinth (Zenobius 5.8; Scholiast on Pindar, *Nemean* 7.5).

In another poem, also encouraging the citizens to achieve status through war, Tyrtaeus speaks of the conspicuousness of the fallen warrior's tomb (West 1972, fr. 12.29–30). Like the Homeric warrior's tomb, Tyrtaeus' is distinguished because it is the due of the dead man, and it was also a source of *kleos* for the warrior's descendants (fr. 12.31).

Tyrtaeus' reference to weeping as an expression of status at funerals was echoed by Solon the Athenian, writing c.600 BC, who wished to be wept for at his burial (West 1972, fr. 21). Plutarch, who probably knew more of this poem than he quoted, said that Solon would have judged the Roman Publicola a happy man because of the great number of his mourners (Plutarch, *Solon and Publicola* 1.4).

Archilochus of Paros wrote a poem, probably in the first half of the seventh century, lamenting the drowning of his brother-in-law (West 1971, fr. 9). Plutarch (*On Listening to Poetry* 6.23a) tells us that the failure to cremate the corpse was a hateful thing for Archilochus; in view of the attitudes of Tyrtaeus and Solon, we might assume that the loss of *kleos* involved may have formed at least part of Archilochus' woe.

Semonides of Amorgos (West 1972, fr. 2) and Sappho of Lesbos (Lobel and Page 1955, frs. 140, 141), both writing in the late seventh century, mentioned funerals, but their comments are not clear on this issue. However, early in the sixth century Stesichorus, probably from Himera in Sicily, wrote his *Funeral Games of Pelias*: this was probably heroising and archaising, but the association of lavish display with elevated status was obviously well enough understood (Page 1962, frs. 1, 2). Elsewhere (Page 1962, fr. 55) he refers to mourning and laments as suitable for the grave, and fragments 56 and 57 (cited together by Stobaeus, *Anthology* 124.15) suggest that Stesichorus was speaking of a common tendency to associate the scale of mourning with the deceased's worthiness (*charis*).

Theognis speaks unambiguously of this relationship. It sounds as if loud mourning was the norm at funerals (lines 1069–70), and the size of the mourning group is directly linked to the status of the deceased (lines 1203–6), as by Tyrtaeus (West 1972, fr. 7). He even speaks of a 'visible' symbol, a kingly couch, as if it were a thing widely wished for, but not widely attainable (lines 1191–4).

Finally, Herodotus tells a story about Cimon, a leading Athenian noble who was murdered in 528/7 BC, and was buried at Athens along with his horses (Herodotus 6.103.3). Cimon was an aristocrat par excellence, head of the Philaid family and winner of

three successive Olympic chariot races in 536–528 BC. Plutarch claimed to have seen his burial place and the graves of his horses around 100 AD (*Cato the Elder* 5.4). The sacrifice of the horses is of course paralleled in the Homeric funeral of Patroclus (*Iliad* 23.171), and is known archaeologically from c.1000 BC onwards. Conspicuous consumption was still linked to status at Athens in the late sixth century BC.

When the quantity of literary evidence begins to pick up again in the fifth century, the same attitudes prevail. In Sophocles' *Antigone*, Creon's denial of burial to Polyneices was above all meant as an enormous insult. Eteocles was buried with all the observances that honour and custom demanded (lines 23–5), but the unburied Polyneices was *athliōs*, dishonoured (lines 26–30; see also 194–206). The story was of course an old one by the fifth century, but Sophocles' use of it implies that honour was still a central concern in burial customs. In *Helen*, Euripides has the form of burial vary with the wealth of the dead man or his friends (lines 1253–4). The great tragedians all express similar notions of the significance of lavish funerals (e.g. Aeschylus, *Oresteia*; Euripides, *Suppliants*; Sophocles, *Ajax*). In the early fourth century, Plato made one of the rare almost intentional statements about the association of burial and rank. For him, the best thing was to be rich and healthy, one of the foremost men, and, on dying, to be buried magnificently (*megaloprepōs taphēnai*, *Hippias Major* 291 D–E).

The most famous expression of Greek attitudes to death and burial is of course the funeral oration which Thucydides (2.35.1–46.2) puts into Pericles' mouth. Thucydides presented death in battle as the apotheosis of citizenship; and, interestingly, the burial of the war dead is the only context we know of where funeral games took place in fifth-

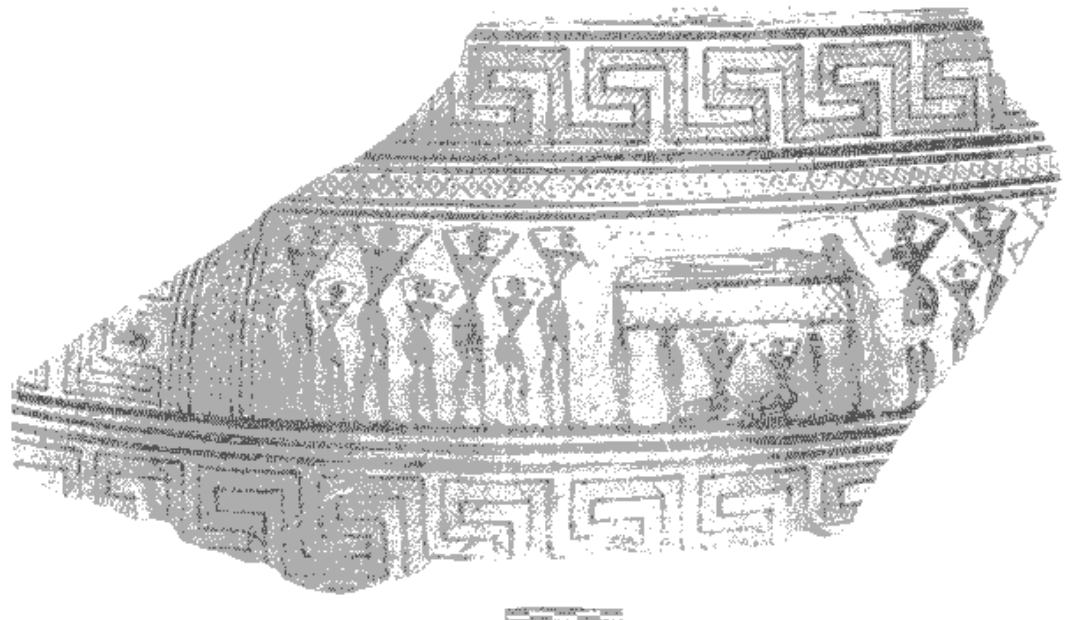


Fig.12 A man's funeral on an Athenian Late Geometric vase of the mid eighth century BC (Athens NM 812, by the Dipylon Master. Photograph courtesy of the Museum of Classical Archaeology, Cambridge)

century Athens. Three inscribed bronze vases given as prizes in these games, probably in the first half of the fifth century, are known (Vanderpool 1969).

In Sparta, ordinary citizens were not allowed any very elaborate funerary treatment; according to the stories in our sources, only those who died in battle or in childbirth were so honoured (Plutarch, *Lycurgus* 27), although the kings, with their ascribed status, also had elaborate funerals (Herodotus 6.58; Xenophon, *Hellenica* 3.3.3; *Constitution of the Spartans* 15.9).

Similar concepts remained constant across four centuries, from Homer to Plato, and in societies as different as the heroic world, Classical Athens, and Sparta. Further independent evidence can be gleaned from funerary iconography. As with the literary sources, most of the evidence is Attic. The Late Geometric scenes suggest the recognition of lavish ceremonies as a desirable thing; laying-out and funeral procession scenes are accompanied by files of dancing women, armed soldiers and chariots, and mourners are numerous. There is some debate as to whether the scenes are contemporary or heroic, but that is not too important; the main thing is that their use on giant grave markers makes it very clear that the attitudes to symbolising status were similar to those found in the contemporary Homeric poems.

Funerary scenes were less popular after 700, but were generally very similar to the Late Geometric examples (Zschietzschmann 1928; Kübler 1950; Hinrichs 1955). The Attic plaques and vases of the sixth century are again similar (Boardman 1955). Burial customs changed enormously between 750 and 500 BC, but the same themes of mourners and processions to the graveside continued to appear. I would take this as a further indication that attitudes to death and burial were essentially unchanged across this period.

With vase painting, there is even a little evidence that the attitude to display which is so clear in the eighth century also applied earlier in the Dark Age. Laying-out and funeral procession scenes become common only c.750, but the earliest mourner to appear on an Attic vase dates to c.850 BC. A small female figure is painted above the handle of a fragmentary krater marking Kerameikos gr.G 43 at Athens (Kübler 1954, Inv.1254). Coldstream points out that the kraters of this form 'are the ancestors of the Dipylon Master's monumental vases, made nearly a century before his time' (1977, 61). At about the same time, c.850–825 BC, a Protogeometric B vase from Fortetsa tomb OD at Knossos seems to show a group of mourners too (Brock 1957, 35). The practice of using large vases as grave markers goes back to at least 900 BC at Athens, and 1000 BC at Lefkandi. The base of the marker of Kerameikos gr.G 2 had been bored through to allow libations to be poured, as in the Late Geometric vases; the continuity of practices from the tenth to the sixth centuries is very suggestive of some continuity in attitudes too (see Coldstream 1977, 33–5; Cavanagh 1977, 319).

One more class of evidence is relevant: the traditions of seventh- and sixth-century funerary legislation. These stories point to recognition of the scale of rites as an index of rank and power. One of the strongest traditions is that Solon passed a law curbing funerals at Athens in 594/3 BC. Solon's law may have been attributed to him in the fifth century in the belief that such a famous legislator really should have passed a law like this, but for the purposes of this chapter even the rejection of the law is not so significant



Fig.13 The funeral of a young woman on an Athenian Red Figure vase of c.470–460 BC (Athens NM 1170, by the Painter of Bologna 228. Photograph courtesy of Hirmer Verlag Fotoarchiv)

as the fact that a need for such laws was perceived in the fifth century. The traditions, even if the details are quite wrong, suggest that the poleis felt threatened by lavish funerary expenditure, which in turn suggests not only that the scale of rites was being used by the wealthy as a symbol of power and status, but, most importantly, that it was understood by the community as a whole as an overt statement on the social order and the relative significance of its members (Garland 1985, 121); in short, the social structure. The significance of genuine laws such as that from Ioulis on Keos, which probably republishes an Archaic law, is very great.

The combination of three different classes of evidence strongly supports the view that a consistent frame of mind existed from at least the late tenth century to the fifth cen-



Fig.14. Mourning figure of a woman painted beneath the handle of the marker vase over Kerameikos gr.G 43, c.850 BC; the horse is commonly interpreted as a chthonic symbol (after Benson 1970, pl.XXXII.4)

ture, where the scale of funeral rites was accepted as a statement on the social structure; and, where sufficient evidence exists, it seems that there was a considerable degree of redundancy between symbolic channels, and that while the forms of symbolism changed, differences in the expression of the social persona continued to be archaeologically visible. This essential continuity of attitudes was also noted by Margaret Alexiou (1974, 14).

Cemeteries and descent

The literary evidence allows us to test the relevance of a second line of approach, through the spatial organisation of the archaeological remains. Van Gennep (1960, 20) pointed out the significance of the entry of the corpse into a spatially discrete area as part of the rites of incorporation into the next life, and Saxe (1970, 119–21) hypothesised a link between the organisation of cemeteries – formal bounded areas reserved exclusively for the disposal of the dead – and the existence within society of unilineal corporate descent groups, tracing their lines from the buried ancestors, and using the cemetery as a symbol to legitimise the monopolisation of access to vital resources (usually the land).

This idea, if acceptable, provides a very important link between social structure and the archaeological record. As a result, it has received a great deal of attention (e.g. Renfrew 1976; Chapman and Randsborg 1981, 14–19). The most complete studies have been

Lynn Goldstein's. After an ethnographic survey of thirty societies, she reformulated Saxe's eighth hypothesis as:

- A. To the degree that corporate group rights to use and/or control crucial but restricted resources are attained and/or legitimised by lineal descent from the dead (i.e. lineal ties to the ancestors), such groups will, by the popular religion and its ritualisation, regularly reaffirm the corporate group and its rights. *One* means of ritualisation is the maintenance of a permanent, specialised, bounded area for the exclusive disposal of the dead.
 - B. If a permanent, specialised bounded area for the exclusive disposal of the group's dead exists, then it is likely that this represents a corporate group that has rights over the use and/or control of crucial but restricted resources. This corporate control is most likely to be attained and/or legitimised by means of lineal descent from the dead, either in terms of an actual lineage or in the form of a strong, established tradition of the critical resource passing from parent to offspring.
 - C. The more structured and formal the disposal area, the fewer alternative explanations of social organisation apply, and vice versa.
- (Goldstein 1981, 61)

Other archaeologists have criticised this argument very strongly (e.g. Hodder 1982a, 196–9; 1984, 51–3), but the Greek evidence suggests that it is not without relevance here. The most important ideas to look for are the tomb's location as a symbol of descent, and the use of corporate descent groups to control vital resources. The notion of the Greeks using the tombs of the ancestors to underpin the legitimacy of private property of course goes back to Fustel, but the holes in his arguments and the polemical aims of his work (see Momigliano 1977, 325–43; Fustel de Coulanges 1980, ix–xxiii) should not blind us to the useful elements in this line of thought. The earliest reference is in Homer (*Iliad* 14.113–14), where Diomedes reminds Agamemnon that he is the son of Tydeus, whose bones lie under the heaped earth at Thebes. Diomedes is demonstrating his membership of the ill-defined elite group of *agathoi* through descent, using a tomb as evidence. None of the Archaic poets deals directly with the matter, but the importance of descent is particularly clear in Archilochus, Tyrtaeus, Theognis, Sappho and Alcaeus. The frequent use of patronymics on Archaic gravestones again suggests the link between tombs and the descent group. The earliest known Attic inscribed gravestone, the seventh-century Keramo stele, bears a patronymic (Jeffery 1961, 76; 1962, 129).

Evidence becomes plentiful only in Classical Athens. In the fourth century, an aspiring magistrate would have to be able to point out his family tombs (Aristotle, *Constitution of Athens* 55.3; cf. Xenophon, *Memorabilia* 2.2.13). Kinsmen, to the limits of the kinship group known as the *anchisteia* (bilateral relatives as far as the second cousin), had to perform funeral rites (Sophocles, *Antigone*; Euripides, *Medea* 1032ff; *Suppliants* 168–75, 524–63; *Trojan Women* 387–90; Demosthenes 43.57ff; 24.107; Isaeus 2.25.4; Aeschines 1.13–14; Lysias 12.96; 13.45–6; Plato, *Hippias Major* 291 D–E. The multiplication of references certainly suggests that this assumption was a widespread one). Indeed, the

word *kēdeia* meant both 'care for the dead' and 'relation by marriage'. An heir had to be able to show that he had carried out the duty of burial in order to inherit (Isaeus 2.25, 36–7; 4.19; 6.40; 8.21–7, 39; Demosthenes 43.65; 44.32ff; Lysias 31.21). Most important of all, burial in the family plot was *proof* of descent, and burial elsewhere grounds for denying it. Descent (as in Saxe's and Goldstein's arguments) meant membership of the citizen estate and with it access to landholding, political rights, and more (Aristotle, *Constitution of Athens* 42.1; Demosthenes 43.79–80; 55.13–14; 57.28; Plutarch, *Themistocles* 1.3. See Lacey 1980, 147–50; Littman 1979, 139–41).

It has been suggested that the organisation of civic space was in the sixth century taken as a strong symbol of the structure of the citizen body (Lévéque and Vidal-Naquet 1964, 18–22; Vernant 1983, 214–19), which would mean that the cemetery must have played an important part in defining the corporate group at this time. The little evidence that there is points to consistent attitudes to the cemetery as a symbol carrying many of the meanings suggested by Saxe and Goldstein. Changes in the spatial relationships of the living and the dead were probably very meaningful, and are an important source of information for the archaeologist. In Chapters 4–6 I will argue that formal cemeteries were monopolised by the Athenian *agathoi* c.1050–750 and again c.700–510 BC. In the light of the Greek attitudes to spatial organisation and the arguments from the comparative evidence, it seems very likely that these changes were significant in terms of both membership of the community and ownership of the land.

Conclusion

Early Iron Age Greek funerals were rite of passage ceremonies, in which symbolic enactment of the ideal social structure had a high potential to enter the archaeological record through the burial practices. While the meaning of particular symbols will always be beyond us, it should at least be possible to identify major structural changes in burying behaviour, and to attempt to understand these within their historical situation.

In Chapter 4, I will attempt to establish patterns in the age structure of the Attic cemeteries. The demographic approach is particularly fruitful, since objective criteria of age and sex are being observed. I will argue that significant changes occurred in the age structures of the cemeteries c.900, 725, 700 and 500 BC. In Chapters 5–8, the demographic line will be pursued further. It will be suggested that the periods of small adult grave plots within small cemeteries (c.1050–750 and 700–510 BC) were periods when only a limited rank group was receiving formal burial. In Part 3 of the book, the social significance of these patterns will be weighed, and it will be argued that both the emergence of the polis in the eighth century and Athenian divergence from the general line of development in the seventh and sixth centuries can be observed.

Demography and space

This chapter focuses on changes through time in two relationships between the living and the dead populations in Attica. First, I will argue that the age structure of the archaeologically known burial population does not always reflect the age structure of the populations which lived in Attica; and then it will be shown that there were changes in both the spatial organisation of the burials of different age groups and the placing of the dead relative to the living.

There is unfortunately insufficient evidence for a proper study of the sex structure of the graves. By and large, most cemeteries seem to have had fairly equal numbers of male and female burials; the only exceptions are the Agora in Protogeometric times, where females predominate (see p. 63 below), and the Late Geometric period, where 53 males have been identified as against only 22 females. Sarah Pomeroy (1976, 46) took this as evidence for selective female infanticide, but the greater ease of identification of male attributes and the small number of graves which could be sexed may explain the imbalance.

The age structure

In this section, I will first set up a model age structure for the cemeteries, and then measure how far the burials diverge from this. It will be seen that the age structure of the cemeteries changed several times between 1100 and 500 BC.

Model age structures

Historical demography has made rapid advances in the last few decades. While it is clear that short-term variations in birth and death rates are common in non-industrial societies, it is generally agreed that prior to the 'demographic transition' of the West in the eighteenth and nineteenth centuries AD, the age structures of agrarian societies were in the longer term generally very stable. We should note the 'great demographic similarity between pre-industrial groups' (Weiss 1973, 42), and that 'any agricultural society . . . tends to adhere to a definite set of patterns in the structure and movement of birth and death rates' (Cipolla 1978, 87). Such evidence as is available from Iron Age Greece suggests that the average age at death was probably fairly typical of agricultural non-industrial societies (for Athens, see Angel 1939; 1945; 1972; Breitingner 1939a; Young 1951; Biesel 1980; for Argos, Charles 1958; 1963; for Lefkandi, Musgrave 1980; for Crete, Charles 1965; Sackett 1976; for Lerna, Angel 1971, 66–7).

Infant and child mortality is high in pre-demographic transition societies, and a fully representative cemetery should have a high proportion of the very young. Model age

tables can be derived from life tables such as those of Acsádi and Nemeskéri (1970) or Weiss (1973), and divergence from these established. The value of too detailed a demographic approach is questionable, and even defenders of paleodemography agree that there are at present strict limits to the amount of precision possible (Buikstra and Konigsberg 1985); but there is little danger of falling into such a trap in Early Iron Age Athens. Excavation reports rarely classify burials more precisely than adult, youth, child or infant, and very often even this much detail is lacking. Accordingly, only a very crude classification can be attempted. Rather than use a life table for which the evidence is simply inadequate, I will divide the burials up into just two age classes, adult/youth and child/infant. Such a framework also avoids some of the pitfalls of recent paleodemography, in that the contrast between adults and sub-adults is one of the most reliable classes of data available (Bocquet-Appel and Masset 1982, 326).

Taking a rather arbitrary division between the child and youth categories at the tenth birthday, an ideal cemetery should break down roughly:

Infant/child	(0–9 years)	45.2–51.8%
Youth/adult	(10 years and over)	48.2–54.8%

Not all groups of graves will be classifiable in such a framework, because of the very small numbers sometimes involved. Quite often, there are only two or three graves found together, and some caution is necessary. To allow a little margin of error for bias in the samples, I shall use the following classificatory scheme:

Type A (adult)	Adult:child ratio of $\geq 3:2$
Type B (balanced)	Adult:child ratio of $< 3:2$ but $> 2:3$
Type C (child)	Adult:child ratio of $\leq 2:3$

This 'death table' is very crude, but is the best level on which to approach the fragmentary data. Within this framework, broad trends of great significance will be detected, and a clear pattern of changes through time will emerge.

Information on the age structure of the cemeteries is rarely presented in full in excavation reports, and evidence must be obtained by independent methods. Reliance on the studied skeletal material alone would make the data base too small for the classification of cemeteries, so I will argue that two generalisations about the relationship between the form of disposal and the age of the deceased apply – first, that in inhumations the length of the grave is directly related to the length of the skeleton (and usually therefore to the age at death, at least up to the stage of physical maturity); and second, that urns containing the remains of cremations were used only for adults and older adolescents. These rules will allow us to put most of the graves into rough age brackets.

Inhumation

The argument here is rather a common sense one, in that the bulk of the Athenian inhumations were supine and extended, but the grave length:age relationship is sometimes questioned (e.g. G. Krause 1975, 12, for Submycenaean). Table 3 shows the grave length:skeleton length ratios for Submycenaean to Early Red Figure. There is clearly

Table 3. *Ratios of grave length to skeleton length*

Site	Mean ratio grave:skeleton	Coefficient of variation	Number of graves
Athens, SM	1.13:1	6.8%	18
Athens, EG and MG	1.74:1	10.6%	3
Athens, LG I	1.33:1	21.5%*	12
Athens, LG II	1.58:1	24.8%*	16
Merenda, LG II	1.47:1	15.2%*	4
Vari, LG II	1.36:1	11.4%	2
Thorikos, LG II	1.37:1	9.8%	9
Athens, PA and Tr.	1.68:1	29.8%*	9
Athens, BF	1.48:1	20.4%*	24
Athens, ERF	1.28:1	15.4%	7
The division between adult and sub-adult graves normally falls at the following lengths:			
Submycenaean	1.35–1.45 m		
Early and Middle Geometric	2.00–2.25 m		
Late Geometric I	1.50–1.70 m		
Late Geometric II	1.90–2.00 m		
Protoattic and Transitional	2.00–2.20 m		
Black Figure	1.80–1.90 m		
Early Red Figure	1.50–1.65 m		

*The coefficient of variation for these periods is exaggerated by the presence of a few abnormally large graves.

some variation, particularly in Late Geometric, but generally it is easy to distinguish adult and sub-adult inhumations. There is a possibility that the very old might be mistaken for sub-adults (e.g. Kerameikos gr. SM 15), or that the occasional very large child burials might be taken for adults (Kerameikos gr. G 50, of Late Geometric date, was 2.2 metres long, but contained a skeleton just 1.05 metres long), but these are relatively minor problems. Figure 15 shows the lengths of adult/youth and child/infant graves across the whole period. There is some overlap in the 1.51–2.0 metres class, but this is much reduced when the periods are considered separately.

There are a few cases of contracted inhumation in Submycenaean times, the most important being the Salamis cemetery. Here, cist graves just 90–120 cm long contained sharply contracted inhumations, which were probably mostly adults. Kavvadias' brief comments cited by Wide (1910, 17–18) suggest the skeletons were fully grown and tightly squeezed into the small graves.

Beginning in Late Geometric II, it became common at Athens to inhumate infants and small children in vases placed on their sides. Occasionally slightly older children were buried in this way – at Eleusis, a five year old in gr. Γ11 (following Mylonas (1975, I, 97–9) in the dating), and a seven year old in gr. Γ18 – but this seems to have been unusual. The earliest example of this practice is Drakou St gr. 11, with a child's bones in a Middle Geometric vase (Alexandri 1977, 19). The custom continued throughout the period under study.

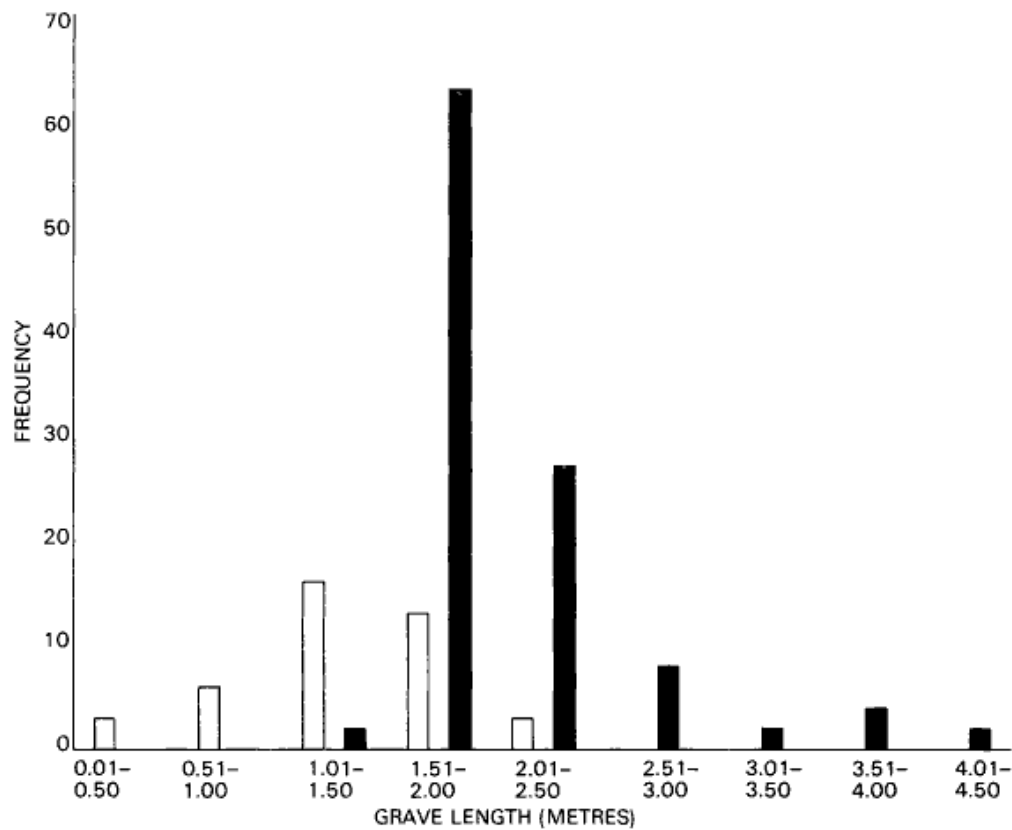


Fig.15. Grave lengths at Athens, 1100-500 BC. The solid bars represent adult graves and the hollow bars subadults (see also table 3 and I. Morris 1985, 34-42)

Cremation

Cremation had been used for two children in the Late Helladic IIIC cemetery at Perati on the east coast of Attica, but neither was inurned, while there were nine cases of adult urn cremation at the site. There are at most fourteen cases of urn cremation in Submycenaean Athens, but the only aged examples are a grave from the Olympieion, and Kerameikos gr.SM 67. Both were adult, and in view of the use of this burial form at Perati and in Protogeometric, it is probably safe to assume that the other examples are also adults (Kriezi St grs.1967/70 and 79 contained weapons, usually an adult male attribute).

Table 4 shows the ages of the analysed Protogeometric to Middle Geometric urn cremations at Athens. Since 97% of the attributable cases are youths or adults, it seems reasonable to assume that this burial form was almost always reserved for this age group.

The evidence for simple cremation, without an urn, is less clear. Of the nine Protogeometric cases, Kerameikos gr.PG E was a nine year old boy, but three other examples from the Agora were adults. A few of the Early and Middle Geometric cases have been called children on the basis of grave goods, but evidence is generally lacking.

Table 4. *Ages of analysed urn cremations from Athens, Protogeometric to Middle Geometric*

Site	Adult/youth	Child/infant	Uncertain
Kerameikos	65	0	2
Agora	4	0	0
Erechtheiou St.	5	2	0
Total	74	2	2



Fig.16. Classification of the Athenian cemeteries by age types. A = adult; B = mixed; C = child (see p.58 above)

From Late Geometric times onward, a few cremations were placed in bronze urns. These seem to have been almost all adult males, although in the fifth century at least one such burial (Kerameikos gr.hS 143, c.420–410 BC) was a child.

The most intractable problem is the use of primary cremation in Protoattic to Black Figure. This form of disposal generally left no remains large enough for analysis. It is usually assumed that the cremations were of adults, and this seems very probable, although direct evidence is scarce. In the Kerameikos Rundbau plot, primary cremations directly replace inhumations of adults in the early seventh century; and this may be the case at Merenda too. In the Kerameikos Bau Zeta plot, the Late Geometric II practice of cutting subsidiary infant burials in vases into the shafts of adult inhumations gave way in the early seventh century to infant vase burials cut into primary cremations.

Further the corpses were burned on pyres in the graves themselves, making a link between the grave length and the bier length certain. Most intact cuttings are over 2.5 metres long, and so it seems quite likely that most or all may have been adults. I will assume in what follows that this was the case.

Conclusion

When these rules are applied, the cemeteries break down as shown in Appendix 1. Some clear patterns emerge (see figure 16). In Submycenaean, the cemeteries represent a full age structure, but adults and sub-adults were buried in separate places. During Protogeometric, sub-adults begin to be under-represented, although not yet seriously; but in Early Geometric to Late Geometric I, they are virtually absent from the archaeological record, making up at most 5–10% of the burials. Only in Late Geometric II do sub-adults return, very often integrated within cemeteries previously used for

adults alone. By the end of Late Geometric some of these cemeteries were completely taken over for infants and children, and continued as type C cemeteries in the seventh century. On the whole, adults and sub-adults were separated in Protoattic and Black Figure cemeteries. At the very end of the sixth century, a full age structure returned, sometimes with separate adult and child plots within a type B cemetery, and sometimes with adults and children together, as in Late Geometric II.

The only explanation for this pattern is that in Early Geometric to Late Geometric I most children were being disposed of in an archaeologically invisible fashion. This idea is sometimes rejected out of hand (e.g. Smithson 1974, 373, and comments in Hägg (ed.) 1983, 212), and the tiny number of ninth-century child burials is attributed to a high standard of living. Bourriot (1976, 998) suggested that the increase in child burials in the Kerameikos Plattenbau plot in the late eighth century was evidence for a poor family, and Kübler has argued that the low numbers of infant and child burials in the seventh century Kerameikos indicate its 'Vornehmheit' (1959, 88).

These positions, arguing for infant and child mortality (i.e. 0–9 years) below 10% in the 'good years', are patently unacceptable. Nowhere in the world was a consistent mortality rate below one hundred per thousand even for infants (0–1 year) alone achieved until about 1900 AD, and to posit a much lower mortality rate for Dark Age Greece is out of the question. Half a millennium later, infant mortality was still extremely high (Aristotle, *History of Animals* 7.588a). In the fifth century Kerameikos cemetery, 445 infant and child burials have been published, along with 510 youth and adult, and 54 uncertain cases. It cannot seriously be argued that the proportions of adult and child graves found in the Dark Age cemeteries represent the actual age structure of Athenian society. From c.900 to 725 BC, only adults were buried in a formal, archaeologically recoverable way. There are abundant parallels from around the world for exclusion from formal burial on the basis of age, and the practice is generally related to a concept of sub-adults as social non-persons. Such a situation may be very appropriate for Archaic Greece (Vidal-Naquet 1981). The spatial separation of children and adults is equally common and changes between unity and separation can be of great importance. The spatial element will now be considered further.

Spatial relationships of cemetery and settlement

The importance of this theme was discussed in Chapter 3. Unfortunately, the general scarcity of settlement remains dated before the late sixth century creates some problems.

Traditionally, discussions of the spatial relationships of the living and the dead have been conducted in terms of intra- and extra-mural burial, the former being any graves within a well defined space reserved for the living, and the latter being outside this space. The use of the word 'mural' points to the common acknowledgement of the boundary between two very different sorts of space with a wall, which had an important role in defining the purity of the town.

While the intra/extra-mural debate is not without significance, it is not the only important relationship, and for much of the period under study, it means applying rather inappropriate concepts of the settlement pattern. Many (although not all) Dark

Age sites were made up of separate clusters of houses, with open spaces between them (Snodgrass 1980, 31). It may be more productive to discuss spatial relationships in terms of the *reservation* of cemeteries; that is, the extent to which they were formal, bounded localities reserved exclusively for the disposal of the dead. The assumption here is that larger, more formal cemeteries represent areas between or beyond the groups of houses, reserved for placing the dead, while smaller, less formal plots are taken as having been on the skirts of or within clusters of houses.

Child plots are generally assumed to have been the most common form of unreserved area, and indeed were still to be found in Classical Greece. However, unreserved adult burial areas also existed at Athens in the Dark Age. Even as late as the end of the eighth century, adults were buried within a few metres of houses at Thorikos, and Classical notions of the impurity of the dead seem to have been a late development.

The main patterns of change will now be considered. In the late tenth century, child unreserved plots were replaced by adults, and then two hundred years later came the almost complete cessation of burial within or between areas of settlement.

There is very little Submycenaean settlement evidence (see figure 17). Kraiker (1939, 132) suggested that the Agora was the core of the inhabited area, following on from a Late Bronze Age settlement. He explained the great distance of the Kerameikos cemetery from the settlement by assuming a succession of Late Helladic IIIC burials along the Eridanos river, reaching the Kerameikos area before 1100 BC (1939, 3). However, this seems not to have been the case, as recent excavations have found no further early burials here, and it is thought that most of the Eridanos valley was too marshy to have been used (Knigge 1984, 35).

Further hints of Submycenaean settlement have been found north of the Agora (Stavropoulos 1965, 54), and it seems best to assume that the whole area was dotted with small villages. Eleventh-century Athens was a very large site, sprawled over at least two hundred hectares, but the density of population was probably very low, and unevenly scattered.

But which cemeteries were reserved, and which not? The large Pompeion cemetery, in a boggy area, certainly was; so too Kriezī St, where the water table was unpleasantly high. Large groups like Agora 15 and Drakou St may have belonged to formal cemeteries. South of the Acropolis, however, there is little evidence from topography. Erechtheiou St and Drakou St belonged to cemeteries which continued in use until Classical times, and (we might presume) were formal burying grounds. Dimitrakopoulou St may too have been a formal cemetery, following on from a Late Helladic IIIC chamber tomb, and staying in use at least until Late Geometric times.

Submycenaean wells have been found among the type C grave groups in the Agora, suggesting some intimacy in the relationship between the living and the dead. Seven adult graves have been found in this area. Gr. T16:1 was a male, but all the others were female. There may be a very plausible explanation for this. Maternal mortality in pre-historic societies has been variously estimated at rates between 10% (Polgar 1972, 205) and 20% (Hassan 1973, 539). Rates in this general area would fit well with the adult female:infant ratio in the type C cemeteries, and it is possible therefore that the unreserved

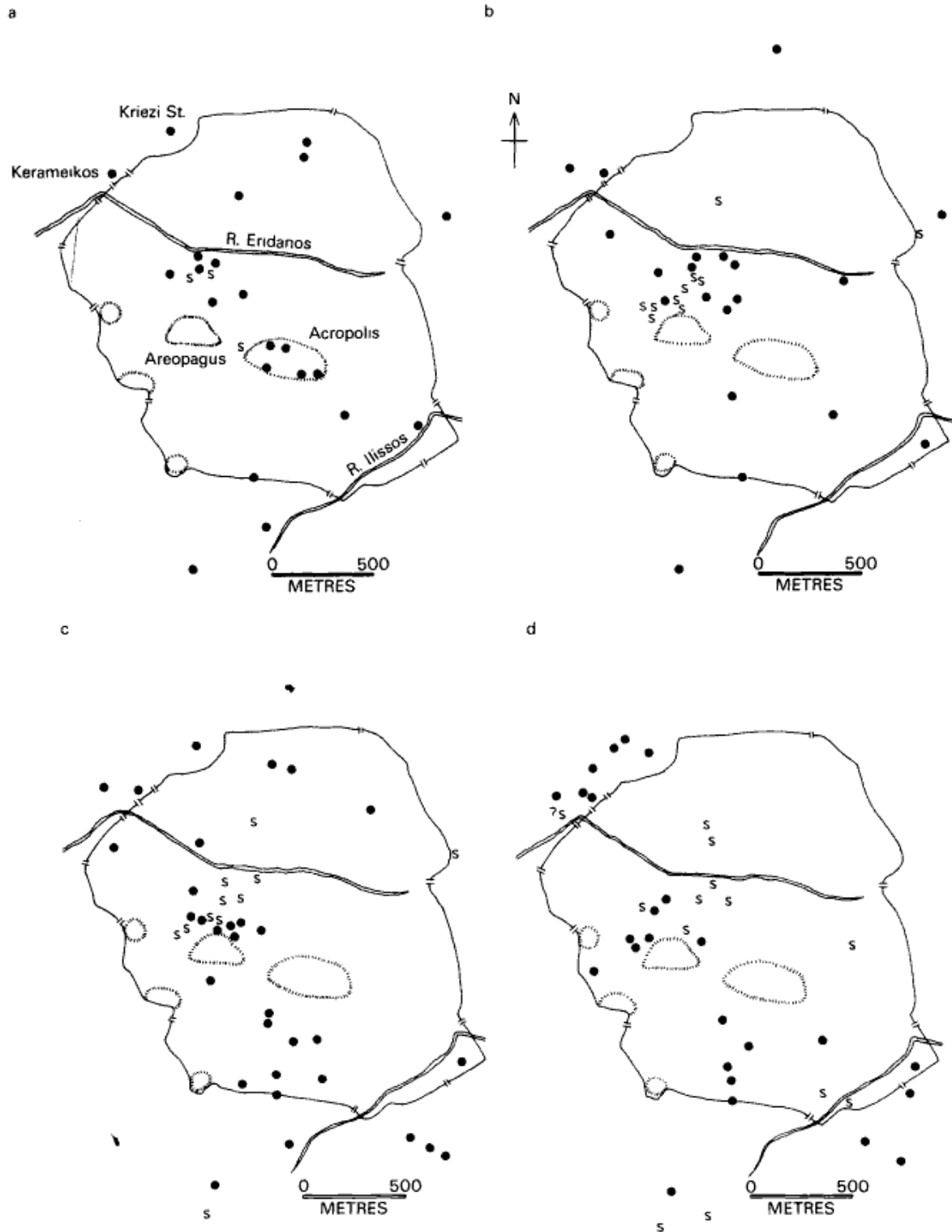


Fig.17. Placing the dead: cemeteries are marked by solid circles, and traces of settlement are marked 'S'. The walls around the city are fifth-century BC, and are shown for topographical reference only
(a) Submycenaean; (b) Protogeometric; (c) Early and Middle Geometric; (d) Late Geometric I

areas were used for those who died under a certain age – probably about seven years – and maternal mortalities. Such deaths are very often treated specially in the location of the grave.

In Submycenaean, then, it is likely that child graves were placed close to settlements, perhaps within the groups of houses or even under house floors, while larger adult cemeteries were placed in reserved areas between the foci of settlement, in areas unsuitable for houses, or perhaps along roads leading away from the settled areas. These cemeteries sometimes remained stable for millennia.

There was a major change in the use of space c.900 BC (see figure 17c). Around the end of Protogeometric, child plots began to disappear, and adult plots began to replace them within the settlement areas. As can be seen, some of the Agora plots were in close association with contemporary wells. Young (1949, 275–9) wished to believe that this area had been given over entirely to burials after 900 BC, but this was obviously not so. The settled area north of the Areopagus included many small type A plots, scattered along the paths, between houses and wells. It might be best to see some of the larger plots, such as the H16–H18 area in the Agora, and the Nymphaeum, as being in land too steep for houses; but many Protogeometric to Middle Geometric and even Late Geometric burials were being made in areas simultaneously inhabited.

In Late Geometric, the same pattern continued, although many more reserved cemeteries were coming into being in areas which were still used for burials in the fifth and fourth centuries BC. As noted above, child and infant graves returned on a huge scale in Late Geometric II, both to reserved and unreserved cemeteries. There are still problems in the classification of burial grounds; the Agora Tholos cemetery (named after a fifth-century round building) is presumably to be considered as reserved, since it was formally bounded by a wall (Young 1939, 6), although people were living only a few metres away, and when burials began c.770–760 BC there had been no wall. On the other hand, Charitonides (1973) suggested that the Nymphaeum went from being a reserved to an unreserved cemetery c.720 BC.

In spite of problems over particular details, the general pattern in Late Geometric seems to have been one of a gradual move away from Dark Age practices. The greater number of cemeteries completely outside the settlement area is probably connected to the increasing formalisation and boundedness of the intra-mural cemeteries. The walling off of the Agora Tholos cemetery has been mentioned; and around 700 BC, the large Ag. Pandeimon cemetery was enclosed, after having been used for 150 years. These are significant developments (see Chapter 10), foreshadowing the abandonment of burials within the settled area in the seventh century.

The scale of the change c.700 BC is apparent in figure 18. It is worth noting that it is not just the unreserved cemeteries which have not produced any burials from the seventh century; many of the more formal cemeteries around the south wall of the Classical city, often in use from the eleventh to eighth century without a break, seem to have been abandoned. However, these formal cemeteries are known only from rescue digs. There were definitely far fewer seventh-century burials made than eighth- or later sixth/fifth- (see Chapter 5); and so the complete absence of graves dated to a poorly represented, low-visibility period in excavated areas rarely exceeding 200 square metres

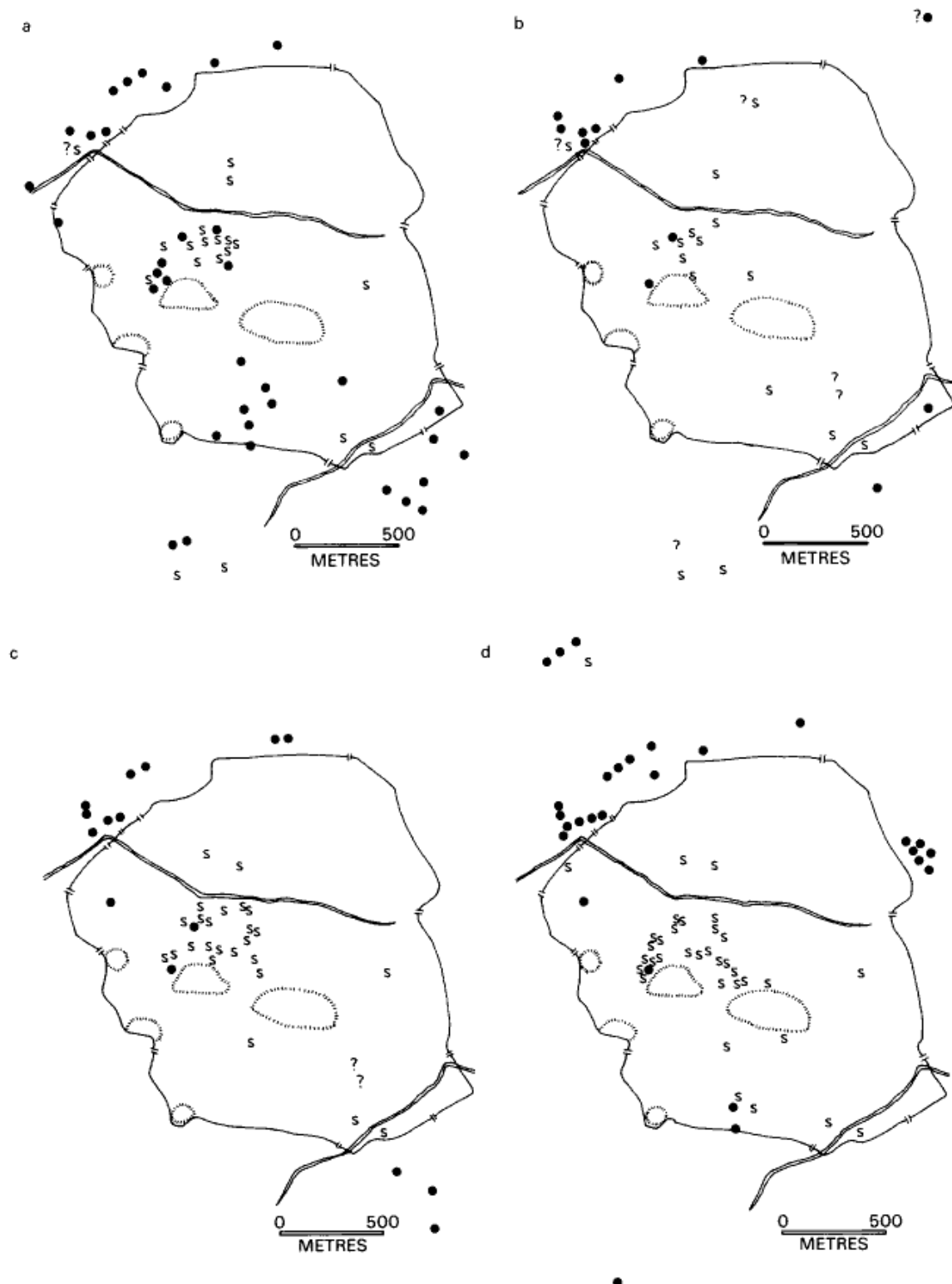


Fig.18. Cemeteries and settlement at Athens: (a) Late Geometric II; (b) Protoattic and Transitional; (c) Black Figure; (d) Early Red Figure

may on present evidence be treated largely as a problem of retrieval. The fuller excavations in the Dark Age/Classical cemeteries north of the city have generally recovered at least traces of their use during the seventh and early sixth centuries. The digs in the Kerameikos and on Kriezi, Peiraia and Sapphous Streets in particular have shown that the seventh-century cemeteries were generally smaller than those of the eighth century, and much more difficult to discover.

What is important, though, is the absence of seventh-century graves in the larger excavations conducted within the town. The decline in numbers of graves at the Kerameikos, Olympieion and Kynosarges is striking; but at the Nymphaeum burials ceased altogether, and in the Agora only infant graves F12:1 (Middle Protoattic) and G12:1 (c.600 BC) can be dated to the seventh century (gr.B21:2 is to be placed around 700, contemporary with Kerameikos Zeitstufe 10; Eva Brann (1962, 123) dated it as late eighth century). Neither of these very extensive excavations can be dismissed as having accidentally missed the seventh-century burial areas; if the patterns of the eleventh to eighth centuries continued on a smaller scale, there should be at least *some* plots, as at the Kerameikos and Olympieion.

The Nymphaeum probably changed function early in the seventh century, with a shrine in use from Middle Protoattic. Sarah Morris suggests that there may have been some disturbed burials here (1984, 10, n.47), but these had certainly ceased by 675. While the change from secular to sacred space might be a sufficient explanation for the Nymphaeum, it cannot account for the total absence of Archaic graves or sherds from destroyed graves in the large-scale excavation in the Angelopoulou plot, less than 150 metres away, but certainly outside the area of the sanctuary of the Nymphs (Dontas 1961/2, 86–7). We can say with some confidence that unreserved burial areas went out of use in this part of Athens in the early seventh century BC.

The Agora was the civic centre and market place of Classical Athens, and it may be that the lack of wells and burials here after 700 BC is to be explained by the origin of these functions at that time (Snodgrass 1983, 169–71). There is some evidence that the Agora was first laid out formally around 600 BC, but this may have been a rebuilding programme in Solon's time, and the five wells of seventh-century date may have served religious or administrative buildings. A different problem is raised by the discovery of the so-called Aglaureion inscription, which suggests that if there was a formal Agora in early times it should be found to the east of the Acropolis, under the modern Plaka, rather than to the north-west, in the same area as the Classical Agora (Dontas 1983, 62–3). Whatever solution is favoured, though, the fact remains that most of the area excavated by the American School is *outside* the Agora proper, and so a change in function does not explain the absence of burials in areas used for settlement in Archaic, Classical and later times. The end of the graves must be seen as strong evidence for the abandonment of unreserved burial areas, and the final movement of the cemeteries outside the settlement area.

Two sixth-century intra-mural child graves are known (Agora grs.A20:10 and G12:18), but otherwise the only exceptions to the early seventh-century change are the remarkable Agora 'Archaic cemetery' (Young 1951; see fig. 46 below) and two probably sixth-century cremations near the Areopagus (Dörpfeld 1892, 445; Judeich 1931, 400),

which may in fact belong to the same cemetery. Young pointed out that this formal burial area was *not* in continuous use from the eighth to the sixth centuries (1951, 78). It was an exceptional cemetery in an anomalous position, coming into use in the mid-sixth century and being abandoned c.500 BC. Not everyone has recognised that the Agora cemetery is unique. Bourriot described the cemetery as 'un banal cimetière archaïque' (1976, 985), ignoring the break c.700. The 'strict austerité' of the burials is not as significant as Bourriot suggests; the same could be said of the grave goods of nearly all Archaic burials in Attica.

These burials, on the edge of the Agora, were something very special. Burial in the Agora was generally reserved for the great heroes or the founders of new cities in Archaic and Classical Greece (see Parker 1983, 39), and it might not be going too far to suggest that this was the cemetery of the kinsmen of Peisistratos, the tyrant of Athens. The great sarcophagus of Cycladic marble found here certainly suggests at least one important figure (Schilardi 1984, 270).

Whether or not this view is correct, it was clearly a very unusual burial ground, and is not evidence for a general continuation of areas for the disposal of the dead within the civic space. The break in intra-mural burial after 700 BC is a most significant development.

What little evidence is available from the rest of Attica is consistent with the Athenian pattern. Formal reserved extra-mural cemeteries are common; those at Eleusis, Merenda and Marathon began in the tenth century, and the Ag. Pandeleimon cemetery at Anavyssos may even go back to the eleventh (P.G. Themelis, pers. comm. 1983). Like Athens, most communities probably had several distinct burial grounds. The lack of excavated Dark Age settlements means that we cannot identify intra-mural graves in the eleventh to eighth centuries, but work at Plasi near Marathon in 1984 uncovered a Protogeometric house with a cist grave containing weapons – presumably the burial of an adult male – in the courtyard (H. W. Catling 1985a, 11).

The best evidence is from Vari. A small settlement dated c.700–500 BC was excavated at Lathouresa in 1938–9. There is no evidence for burial within the site, but early graves (probably seventh-century) along with a mound 17 metres in diameter were found at the foot of the Lathouresa spur in 1977 (Lauter 1985a, 64). Philippson had suggested that the main Vari cemeteries belonged to Lathouresa (1952, 811), but this is not likely. Traces of a large settlement going back to at least 700 BC were found between Vari and Varkiza in 1982, which is probably to be associated with the East cemetery, while the North cemetery very likely served a third settlement (Lauter 1985a, 66). Osborne's interesting suggestion (1985, 26) that the North and East cemeteries are in fact parts of a single very large burial ground seems less likely.

At Eleusis, the grave of an adult male aged about thirty was found beneath the 'Sacred House'. This was probably a Late Geometric burial, and seems to have been a special case; sacrifices continued over the grave until about 600 BC (Travlos 1983, 334). Apart from this, there is no evidence from the settlement at Eleusis. The only other Attic site with areas of both settlement and cemetery excavated is Thorikos. Even here, the tiny areas of houses uncovered are little help. The earliest burial excavated by the Belgians is gr.58, dated to Middle Geometric I, but this was definitely cut into an Early Geometric

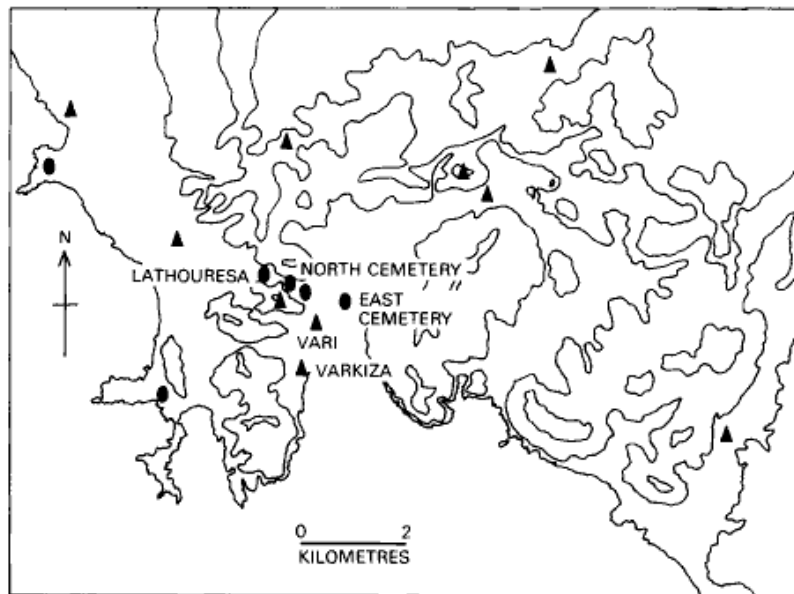


Fig.19. Settlements and cemeteries in the Vari area in the eighth to sixth centuries BC. Triangles represent settlement or sanctuary remains; ovals represent burials. See fig. 60 below, and Lauter 1982; 1985a

house after the area had been abandoned, and is therefore not an example of unreserved burial. The Late Geometric cemeteries were more formal, although they came right up to the walls of the Late Geometric II houses (see fig. 20b).

The main early seventh-century settlement was under the Classical industrial quarter and relatively little of it has survived. A small but better preserved area of Archaic buildings on Velatouri included no graves.

Conclusions

In this chapter, questions of 'who' and 'where' have been considered. A pattern of change has been identified in the age structure of the cemeteries, which seems to indicate the separation of adults and sub-adults in some periods, and even the exclusion of most of the young from formal burial. This pattern is complemented by changes in the spatial relationships of cemeteries and settlement areas.

In Chapter 5, a further demographic question, the size and nature of the burying groups contributing to the plots and cemeteries, will be investigated. Changes in the burying groups will be identified, and related to the patterns summarised in figure 21. I will then argue that the only plausible explanation of the data is that in some periods exclusion from the cemeteries was practised on the basis of rank.

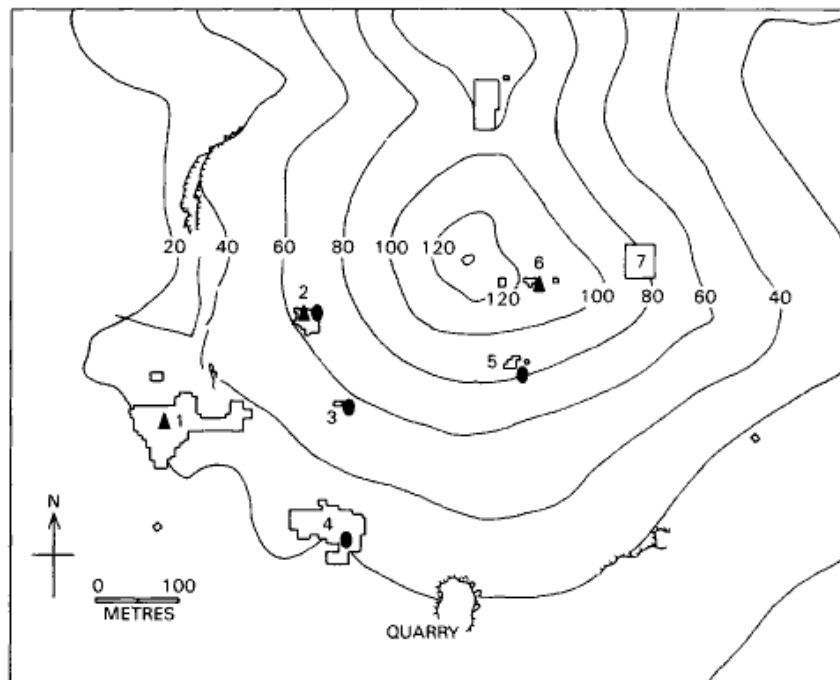
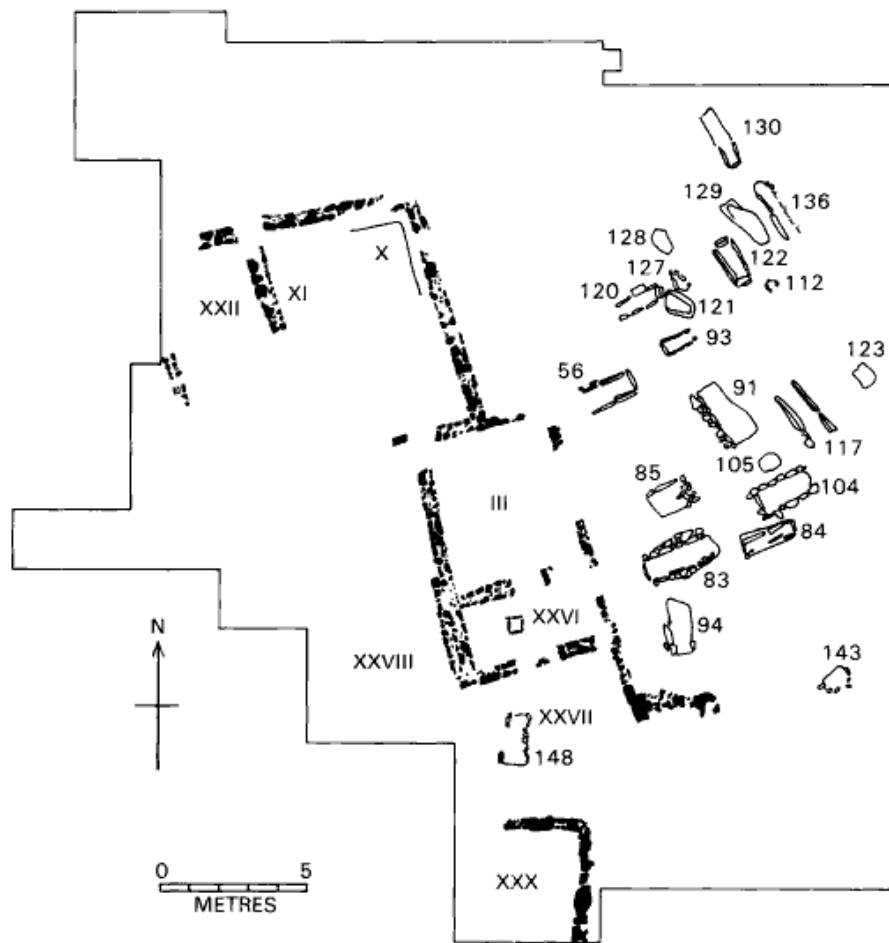


Fig.20. (a) Settlement and cemeteries at Thorikos, 900–500 BC. Triangles represent settlement evidence, and ovals cemeteries. Excavated areas are outlined. 1: industrial quarter, with Archaic settlement remains; 2: D 52 area (fig.20b); 3: Geometric cemetery; 4: theatre, with Archaic graves; 5: Geometric and Archaic cemetery; 6: Archaic settlement evidence; 7: Mycenaean tomb III, with Late Geometric and Archaic hero cult. A Middle Geometric grave has also been found at Thorikos, said to be 400 metres North West of the Theatre, but its location cannot be fixed precisely. Contours are shown in metres above sea level



(b) The D 52 area in Late Geometric II. Rooms X/XI and XII were occupied c.900–825 BC, and were probably in ruins in Late Geometric times. Area III was probably a courtyard in the ninth century. From c.750 to 700 BC, III, XXVI and XXX were occupied, and XXVII and XXVIII were used as open areas. Themelis (1976, 53) suggested that the buildings were mausolea, and Lauter (1985b, 163) that they were chthonic cult houses. However, all the evidence points to domestic use. All the burials shown date to Late Geometric II. The whole area suffered very badly from erosion and from terracing work in the fourth century BC

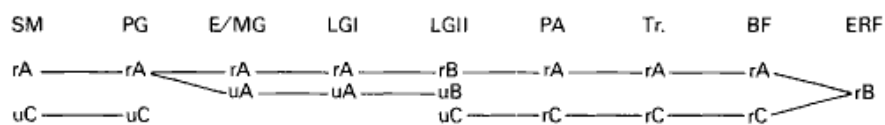


Fig.21 Changing age structures and spatial organisation in the Attic cemeteries, 1100–500 BC. r = reserved; u = unreserved; A = adult; B = mixed; C = child

The burying groups

As we move from changes in age structure and spatial organisation to changes in the size of the adult groups contributing their dead to the cemeteries, problems multiply. Changes in total numbers of graves from Attica have been noted. Snodgrass (1977, 10–18; 1980, 22–4) emphasised the sudden increase in Late Geometric, while Camp (1979) stressed the fall in numbers after 700 BC (see Snodgrass 1977, 12; 1980, 93; and his reply, 1983, 169–71). These changes form part of a very important pattern, but one which must be analysed on a longer time scale and at a much more detailed level if it is to be understood properly. Both Snodgrass and Camp have related numbers of graves to population levels, but, as will be seen below, such an interpretation cannot easily be made to fit the evidence at the level of the individual plots and cemeteries.

Figure 22 shows the number of adult and child burials per annum at Athens across the eleventh to fifth centuries. It differs from figure 23, which does not take into account the changes in age structure discussed in Chapter 4. Comparing the total number of Protogeometric to Middle Geometric graves with those of Late Geometric is not a valid procedure, since in Late Geometric II over half the burials are those of sub-adults, while in Early Geometric to Late Geometric I less than one-tenth are children. As a result, the rather improbable 4% per annum population growth suggested by Snodgrass is reduced.

Camp's explanation of the fall in numbers after 700 – a disastrous drought – has largely failed to win support. It will be returned to in Chapter 9. Further, neither Snodgrass nor Camp accounted for the fall in numbers of adult graves at Athens after Submycenaean, or the meteoric growth rate around 500 BC. After examining how the changes in numbers actually worked, at the level of the grave plot, I will develop an alternative explanatory model, of exclusion from formal burial on the basis of rank, and will go on in Chapters 6–8 to elaborate this and to argue that the evidence fits this model better than any other.

Cemeteries and plots

The burying groups will be divided into two types: the cemetery and the plot. The cemetery is taken as an area reserved for the disposal of the dead, sometimes comprising a number of smaller sub-units, or plots, but spatially distinct from other cemeteries. It is not practical to set up an arbitrary distance as constituting the boundary between separate cemeteries or separate plots within a single cemetery. Instead, I will concentrate on the burying group at the lowest level – the plot – only taking several plots together as a cemetery when there is good reason to believe that they were contiguous.

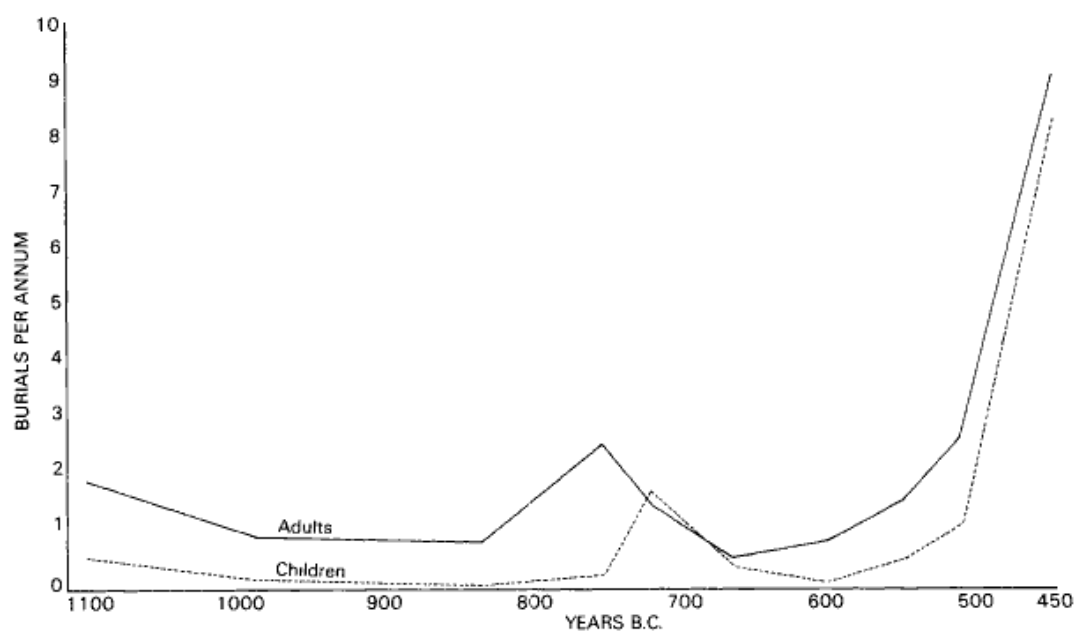


Fig.22 Numbers of adult and child burials at Athens, 1100–450 BC

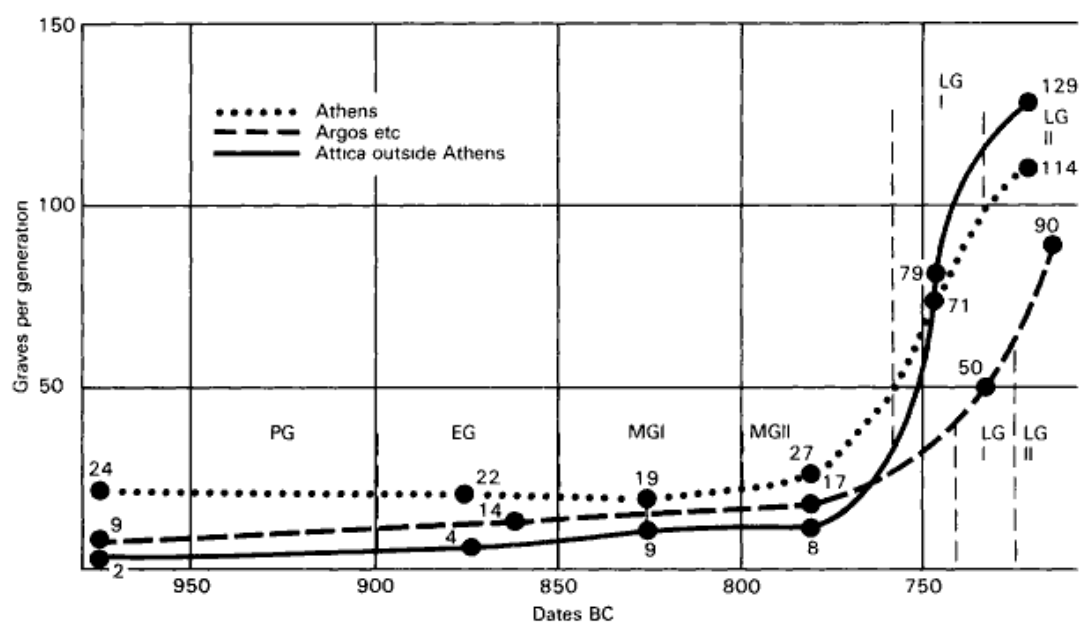


Fig.23. Total numbers of burials per thirty-year generation for Athens, Attica and Argos, 1050–700 BC (after Snodgrass 1980, fig.4)

Thus the plots of graves in the Ag. Triada area in the Kerameikos will be treated together as a cemetery, and the plots near the Pompeion will be considered as a separate cemetery, since there always seems to have been an open area between them. Other areas, such as the Agora, are less clear. The Kolonos Agoraios obviously constitutes a small cemetery, but Classical and later disturbances mean that the connections between most of the excavated grave plots cannot be identified. These plots will be treated as separate entities.

Methods of calculation

There are two commonly used methods for calculating the 'community' represented by a group of burials. The first is to assume a standard death rate and to compute from it the number of people contributing their dead to the plot or cemetery across its period of use. Death rates of around 30 per 1,000 per annum are the norm in agricultural societies. By this method, a cemetery in use for fifty years and containing eighty corpses would represent a burying group of fifty-three people, by the formula

$$p = \frac{1000}{(dt/n)}$$

so that

$$p = \frac{1000}{(\{30 \times 50\}/80)}$$

$$p = 53.33$$

where p stands for the population of the burying group, d the death rate (here 30), t the time for which the cemetery was in use, and n the number of burials made. This method is appropriate when the burying group has a full age structure.

A second method, in some ways more suitable for the Dark Age and Archaic cemeteries where sub-adults are not always fully represented, is to use the formula

$$p = \sum \left(\frac{na}{t} \right)$$

where in addition to the symbols used above a stands for the average age at death of the adult population (see Alden 1981, 15–20). The average age at death in the skeletal population is of course not likely to be the same as the life expectancy at birth (Sattenspiel and Harpending 1983), and so it is best to use this formula only for the adult population.

The advantage of the second method is that it can be applied equally well to all the cemeteries across the whole period, irrespective of age structure, to produce a figure for adult contributors. If this is doubled, a rough figure for the population of the contributing group is obtained.

The two desiderata for these calculations are full excavation of the group of graves

under study, and knowledge of the length of time the cemetery was used. The problems of chronology were discussed in Chapter 1, but the first criterion can be considered only with reference to particular cases.

Establishing trends

As well as the two levels of analysis of cemetery and plot, it is likely that cemeteries will have been of many different sizes in each period. What I am aiming to do here is to reach conclusions on general trends – that is, a descriptive model of cemetery sizes from the eleventh to sixth centuries BC.

Simplifying somewhat, we can speak of two main types of Attic cemeteries. Following Cavanagh (1977, 288) I will call these the Kerameikos model and the Agora model. The only site where there has been enough excavation to identify a useful number of separate cemeteries is Athens. Here the Kerameikos model is typically quite a large cemetery, established early in the Dark Age, used exclusively for burials, and often continuing in use into Classical times. The Agora model, on the other hand, is characterised by groups of graves about the same size as the individual plots within the Kerameikos-type cemeteries, remaining in use for only two or three generations, and then forgotten.

Some cemeteries fit well into neither category. For example, the Middle Geometric Areopagus group is rather large for an Agora-type plot, but has none of the characteristics associated with the Kerameikos-type cemeteries. The Nymphaeum is another case; in use for three and a half centuries, it probably never had more than one Agora-type plot at any one time.

In most periods, we must deal with two distinct cemetery types, and in the larger cemeteries at two levels of analysis (the individual plot and the cemetery as a whole). This framework allows us to compare changes in the size of the burying groups in the relatively fully excavated cemeteries across the Dark Age and Archaic times.

However, across these six centuries, and over the whole Aegean, fully excavated cemeteries are in a distinct minority. This raises two more questions.

1. Are the fully excavated cemeteries of each period typical of other contemporary cemeteries in their absolute size?
2. Are the changes in size through time of the fully excavated cemeteries typical of the other cemeteries, known only from partial excavation?

The first question is almost impossible to answer satisfactorily. At the level of plots, the consistency in size between the individual plots of large cemeteries and the whole Agora-type plots suggests that in each period there was a fairly typical size of plot, found in most contexts; but at the level of whole cemeteries, we simply do not know.

The first question is fortunately not quite so important for the aims of this chapter as the second, which is rather easier to answer, but still poses serious problems for the most obvious approaches. Calculating mean cemetery and plot sizes is not sufficient, since the sample is in all cases heavily dominated by the few extensively explored cemeteries.

The median cemetery size is less sensitive to the impact of the larger excavations, but still suffers from distortion. If for some reason the burials of one period are more 'visible'

than those of another, such that they tend to be discovered and recorded in chance finds of single graves more often, this will cause the median, as well as the mean, cemetery sizes to fall. Problems of visibility will be returned to in more detail in Chapter 6. The mean and median cemetery sizes are shown in table 5. The great size of the coefficients of variation reflects the distorting influence of the large excavations.

No average figure can be obtained to produce a clear-cut graph of changing group sizes; instead, each cemetery must be approached separately. A clear pattern will be seen to emerge. Often this will not be too far from the indications of table 5, but will be more independent of the large cemeteries and problems of visibility. Inevitably the result will be rather impressionistic, but will be more faithful to the nature of the evidence than simple averages.

Analysis

Submycenaean

Only two Submycenaean cemeteries have been fully excavated: the Pompeion area of the Kerameikos and the Salamis Arsenal. The latter was never properly published, and we are largely limited to the Kerameikos for sustained analysis.

Of the 112 Submycenaean graves in the Kerameikos (Krause's *Zeitstufen* 1–2b), 74 can be aged. These break down as 46 adult, 20 youths and 8 children. If we assume that the other 38 graves divide up on the same ratio, we have a figure of 70:30:12. Part of the cemetery was destroyed by the Dipylon Gate in the early fourth century. If we add another 15 adult and youth graves as a rough estimate of the original size of the cemetery, we have 115 members of the adult/youth class (on the original size of the cemetery, see Kraiker 1939, 8; G. Krause 1975, 188; Knigge 1984).

For the age at death, a vital factor in the second method of calculation of group size described above, we cannot expect much precision. The mean age at death of Breiting's small sample (1939b) was 34 years; Angel (1972, 94) suggested 38.8 years for males and 30.4 for females in Dark Age Athens. At contemporary Lefkandi, most adults died between 17 and 40 years (Musgrave 1980, 439). Parameters of about 20 to 35 years will be used.

The formula becomes

$$\frac{115 \times 20}{75} \text{ up to } \frac{115 \times 35}{75} = 30.7 \text{ to } 53.7$$

This quantification is unlikely to be an overestimate, since the general tendency is if anything to take Submycenaean as a shorter period than 75 years (see Chapter 1). The graves are those of at least 30–50 adults burying together in the eleventh century: perhaps 100 or so people in all. The Salamis cemetery represents a similarly sized group; about 100 graves were found, probably all adults, and most if not all belonged to the earlier phases of Submycenaean. Again, 100 people contributing seems to be a reasonable estimate.

The size of the cemeteries known only from rescue digs is unclear. The small areas excavated on Kriez, Drakou and Erechtheiou Streets contain numerous closely packed

Table 5. *Adult burying group sizes of cemeteries: mean, median and coefficient of variation*

<i>Area</i>	<i>Mean</i>	<i>Median</i>	<i>CV</i>
<i>Submycenaean</i>			
Athens	4.0–7.0	1.7–2.8	228.5%
<i>Protogeometric</i>			
Athens	1.1–1.8	0.2–0.4	214.5%
Attica	0.5–0.9	0.5–0.9	—
<i>Early and Middle Geometric</i>			
Athens	1.0–1.7	0.4–0.75	138.7%
Attica	0.8–1.4	0.4–0.75	142.1%
<i>Late Geometric I</i>			
Athens	3.4–6.0	1.6–2.8	119.4%
Attica	4.2–7.3	1.2–2.1	128.9%
<i>Late Geometric II</i>			
Athens	1.4–2.7	0.9–1.6	91.2%
Attica	3.4–5.9	1.8–3.2	99.8%
<i>Protoattic</i>			
Athens	2.1–3.5	1.0–1.7	93.8%
Attica	1.1–2.0	0.6–1.1	78.6%
<i>Transitional/Black Figure</i>			
Athens	2.9–4.9	0.4–0.7	147.8%
Attica	1.9–3.4	1.5–2.6	49.8%
<i>Early Red Figure</i>			
Athens	5.6–8.0	1.6–2.8	138.3%
Attica	2.2–3.8	1.6–2.8	69.9%

graves, which perhaps belonged to Kerameikos-type cemeteries, but their extent cannot be judged.

The type C cemeteries were very small. The Kolonos Agoraios, Acropolis and perhaps Olympieion groups have been fully excavated, but all had suffered very badly from erosion and later disturbance. The one adult and twelve children on the Acropolis form the largest group. Even assuming there were originally twice as many burials, 24 children spread across 75 years at a nominal 50% child (0–9 years) mortality rate probably represents an adult group of 5–10 members (although the child graves need not span the whole period, of course). The same order of magnitude is indicated by the other smaller groups of child graves.

The question of the size of the plots within the Kerameikos and Salamis cemeteries is hotly debated. It is perhaps likely that the twelfth-century chamber tombs at Perati in Attica each represent the remains of a nuclear family, and we might assume some continuity into the eleventh century. There is a hint of this in the spatial organisation of the cemetery at Salamis, with seven separate rows of graves; each would probably have represented a burying group of six to eight adults (i.e. three or four nuclear families). However, no plan is known and the grave associations have been lost, and the exact situation cannot be recovered.

At the Kerameikos, the organisation is complex. Kraiker's original suggestion (1939, 7–8) still seems the best, with the cemetery divided into plots representing the burials of

five to eight adults, like the Salamis plots (Cavanagh (1977, 258, n. 22) favours the same view).

The Kriezi and Erechtheiou St and Agora I5 plots give the same impression of smallish groups, with five to nine adults, but the partial nature of the excavations makes it unwise to press the point too far. The Vas. Sophias Avenue cemetery is said to have contained eleven inhumations, and we might assume that these were the Submycenaean burials mentioned in the report (H. W. Catling 1984, 7). However, even if all of them are Submycenaean, it is not clear whether they make up the whole Submycenaean cemetery, or for that matter whether they span the whole period, or are just a few burials in the Submycenaean tradition at the foundation of a new cemetery c.1050 BC, as is the case with Kerameikos grs.PG 21–3.

In conclusion we can say that the large cemeteries represent substantial groups of people, with at least thirty to fifty adults burying together, and were subdivided into plots of five to eight adults. The type C plots found at Athens perhaps represent the child mortalities of a group of similar size to the Kerameikos plots.

Protogeometric

There is a very sharp difference between the plots and cemeteries of Submycenaean and those of Protogeometric. The largest Protogeometric cemetery is that on the corner of Vas. Sophias Avenue and Irodou Attikou, probably with 62 graves. Unfortunately, this is not yet published. It is not clear whether the whole cemetery was completely cleared, or whether it spanned the whole Protogeometric period. Since Submycenaean graves were found, the cemetery probably has graves from at least 1050; but there is no evidence when it went out of use. If it did span the whole of Protogeometric, the adult population would have been

$$\frac{62 \times 20}{150} \text{ up to } \frac{62 \times 35}{150} = 8.3 \text{ to } 14.5$$

This is a similar size adult group to that in the Kerameikos. Here, 48 graves have been found. The cemetery has been completely excavated, although some Protogeometric graves were destroyed in the sixth century BC. Gunter Krause suggests that a further 20 should be added for the disturbed area (1975, 191), making the 'community' size

$$\frac{70 \times 20}{150} \text{ up to } \frac{70 \times 35}{150} = 9.3 \text{ to } 16.3$$

as compared to 30–50 in the Submycenaean cemeteries. Unfortunately, there is no further large Protogeometric cemetery with which to compare this decline, but the tiny size of the other Protogeometric groups known suggests that this was a general decline.

The best evidence is for the size of the grave plots. Both Krause (1975, 73–4) and Cavanagh (1977, 289–91) identified small, spatially differentiated plots in the Kerameikos, of three or four graves spanning two generations. There were usually about three such plots in use at any one time. The Kerameikos and Salamis Submycenaean

plots were all much larger than this, and two clusters of graves excavated in the 1967 Kriezī St excavation, of four and five burials, also suggest a larger 'community' than there is evidence for in the Protogeometric plots in the Kerameikos or on Erechtheiou St. The six graves there span the whole 150-year period; this would mean an adult group of 0.75–1.4 members (although a few more graves may have been missed or destroyed).

The small plot excavated at Nea Ionia was a similar size to the Athenian plots, with four adult graves. All are Late Protogeometric; unfortunately, it is hard to be precise about the period of use of the Nea Ionia plot, and so an estimate of the 'community' size is difficult. It is unlikely to have been larger than three or four, however, and falls into the same size group as the Athenian cases.

Other Protogeometric graves have been found in Attica; a very small plot at Eleusis, and no more than two each at Anavyssos and Merenda, perhaps three at Marathon, and one at Menidi. In all, the scanty Attic evidence supports the Athenian picture; a plot of more than two or three adult contributors seems to be unknown for Protogeometric.

Early and Middle Geometric

The largest surviving cemetery is the Kerameikos Ag. Triada area, with thirty graves. There were no doubt more originally, destroyed in the sixth and fourth centuries BC. If we assume an original total of forty graves, this would represent a 'community' of 5.8–10.0 adults. Allowing for a little chronological flexibility and inaccuracies in the numbers of graves destroyed, we might say that the burial group of 1050–750 BC was usually around 10 adults.

The only other quite fully excavated cemetery at Athens is the Areopagus North Slope group, of at least ten graves and probably rather more originally, spread over Early Geometric and Middle Geometric I. The group is smaller than the Kerameikos, and perhaps represents a single rather large plot, in use over three or four generations. The Early Geometric II/Middle Geometric I graves are also rather unusual in grave type and age structure. The other Agora plots, however, seem to correspond to the separate plots in the Kerameikos.

As in Protogeometric, small grave groups can be identified in the Kerameikos (Hachmann 1963; Cavanagh 1977, 289 and 336). Again, these represent 'communities' of no more than two adults, burying together for two or three generations. Taking Protogeometric to Middle Geometric as a whole, the average adult group of 9.2–16.0 is a clear decline on Submycenaean. This decline can also be observed in the smaller partially excavated areas, as in Protogeometric.

The only relatively fully excavated cemetery outside Athens is at Anavyssos (Ag. Pandeimon). The Early/Middle Geometric graves here were excavated by Mastrokostas in 1970, although Verdelis and Davaras found a few graves from the early eighth century in 1965. The earliest material from 1970 goes back to the Early Geometric II/Middle Geometric I transitional phase. The earliest graves were in the south-west part of the cemetery (Themelis 1973/4, 108), and the plans of grs.70/IX, XX, XXI, XXIV–XXVI and XXXI seem to show trench-and-hole cremations of typical ninth-century Athenian

A few Early and Middle Geometric graves have been found at other sites around Attica, most notably in the Eleusis South Cemetery, and at Marathon, Merenda and Palaia Kokkinia. Few details are available on these, but in all cases their numbers were very small.

Late Geometric I

For the first time since Protogeometric, the Kerameikos is not the largest excavated cemetery at Athens. One reason for this is clear: the bulk of the area used for the Late Geometric I cemetery was destroyed by Mound G in the sixth century. The earliest graves in the south-west, hard up against the cutting for the fourth-century 'Gräberstrasse', are Late Geometric I, as are the first in the north-east part (see fig. 40). The whole area between hS 225 and G 45 is likely to have been used in this period. Only ten adult graves survive. Grs. hS 290 and 291 certainly belonged to the north-east plot (see G. Krause 1975, 191). The other Kerameikos cemetery, on the north bank of the Eridanos, was even more badly disturbed (Kübler 1954, 4), and cannot be much help here.

While the Kerameikos may not be a good guide, other cemeteries give an impression of massive growth in Late Geometric I. The Peiraios St cemetery has only been partly excavated, under far from ideal conditions, but at least 24 adult Late Geometric I graves – and probably many more – have been found in a very small area, certainly no more than 100 metres long. The cemetery has a 'community' of at least 19.2–33.6 adults. The community in the Ag. Triada area in the Kerameikos is of course impossible to establish securely, but 20 Late Geometric I graves here would probably be quite a conservative estimate, representing an adult group of 16–28, in maybe two or three plots.

The plots on Peiraios St were quite large; six graves were found together in the Sappoundzakis plot, and Palaiologos' discovery of eleven Late Geometric I graves with marker kraters, and doubtless more without, in a very small area suggests plots of some size.

The same conclusion is suggested by the Kavalotti St excavation, which cut a slice through the cemetery. The close packing of grs. B, IB, K, KA, 1 and 2 on the south side of the trench indicates a single plot. The group using this cemetery in Late Geometric I was 4.8–8.4 strong; in Early and Middle Geometric it is one of the larger cemeteries, but still represents only 2.8–4.25 adults.

The last group at Athens worth mentioning is the Agora Tholos cemetery, which has four Late Geometric I adult graves, belonging to a 'community' of 4–7 adults, or about the same size as the individual plots on Peiraios or Kavalotti Sts. The probability that it represents a single plot is perhaps enhanced by Angel's claim of consanguinity among its members (1939, 237).

The Late Geometric I cemeteries in the Attic countryside were very much larger than those of Protogeometric to Middle Geometric. The best evidence by far comes from the Ag. Pandeimon cemetery at Anavyssos.

The horizontal stratigraphy developing from south-west to north-east breaks down somewhat in Late Geometric. Figure 25 shows the graves securely datable to Late Geometric I (in black; Middle Geometric graves are shown in outline). There are two

very clear nuclei here; one beginning with grs.65/III, VI and XVII, growing out of the Middle Geometric cemetery, and another group to the north-east, beginning with gr.65/XLII, of transitional Middle Geometric II/Late Geometric I. From this, graves radiate in all directions. There is no datable material from grs.65/XXXVII and XLI and gr.73/XVI, but their positions make Late Geometric I dates likely. Grs.65/X, XI and XXX may be a third plot, or just an offshoot from the Middle Geometric cemetery. Since grs.65/VI and VIII are undated, perhaps forming a bridge with the earlier graves, this seems quite possible.

Graves datable to the end of Late Geometric I are shown in figure 25b. Both Late Geometric plots continued to grow, and the space between them began to be filled up with grs.65/XXXII and 73/XVII. About 28 graves are datable to Late Geometric I, giving a burying group of 22.4–39.2 adults – more than twice the Middle Geometric ‘population’. Each of the two large plots seems to include about 12 to 20 adults, like the plots on Peiraios St.

The Late Geometric cemetery at Merenda was also very large, but precise figures are lacking. Very few Middle Geometric or earlier graves have been mentioned in the site reports, and it seems that almost all the graves found in 1960–8 were Late Geometric.

In spite of the areas of uncertainty, it is very clear that in Late Geometric I both cemeteries and the plots within them were considerably larger than had been the case in Protogeometric to Middle Geometric times.

Late Geometric II

The largest adult cemetery at Athens is on Nilios and Erysichthonos Sts, with a community of 9.0–15.75 (assuming a twenty year period of use in Late Geometric IIa). In the first part of Late Geometric II the Agora Tholos plot had a similar sized burying group to that in Late Geometric I; but it is clear that in IIb – if such fine subdivisions are justified – the size of the ‘communities’ was falling.

In the Kerameikos Ag. Triada cemetery, the group of graves known as the ‘Plattenbau’ represents a single type B plot. Six adult graves survive. A large part of the plot was destroyed by a Roman tomb; doubling the numbers of graves, we get a community of 8.7–12.0. This is quite large, but no other graves are known from the area (although some may have been destroyed). Flexibility is necessary in deciding the lengths of Late Geometric I and II; on the whole it is likely that the ‘population’ declined in IIb, but this cannot be certain.

The cemetery on the Eridanos north bank is difficult to understand. Two or three separate plots can be detected, but all were badly disturbed.

It was noted in Chapter 4 that the Attic cemeteries were changing from type A to type B age structures in Late Geometric II; here we must add that this may have been accompanied by a slow decline in the size of the adult group burying together. In some cases, the decline went so far that during IIb cemeteries went over completely to type C, with adult burials dying out.

Similar processes can be observed in detail at Anavyssos. Figure 26 shows the Ag. Pandeleimon cemetery in Late Geometric IIa and b (fig. 26b also includes several graves

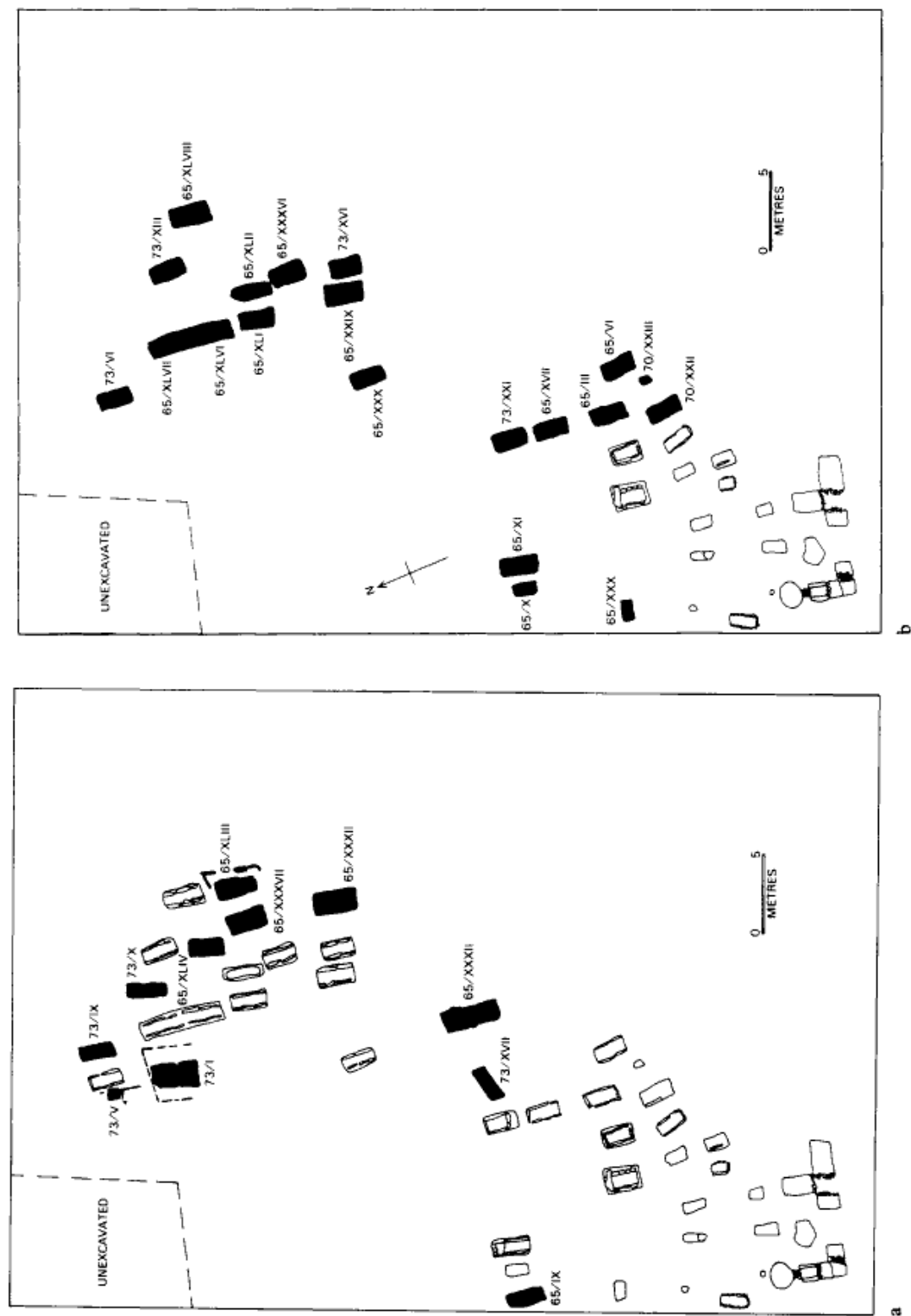
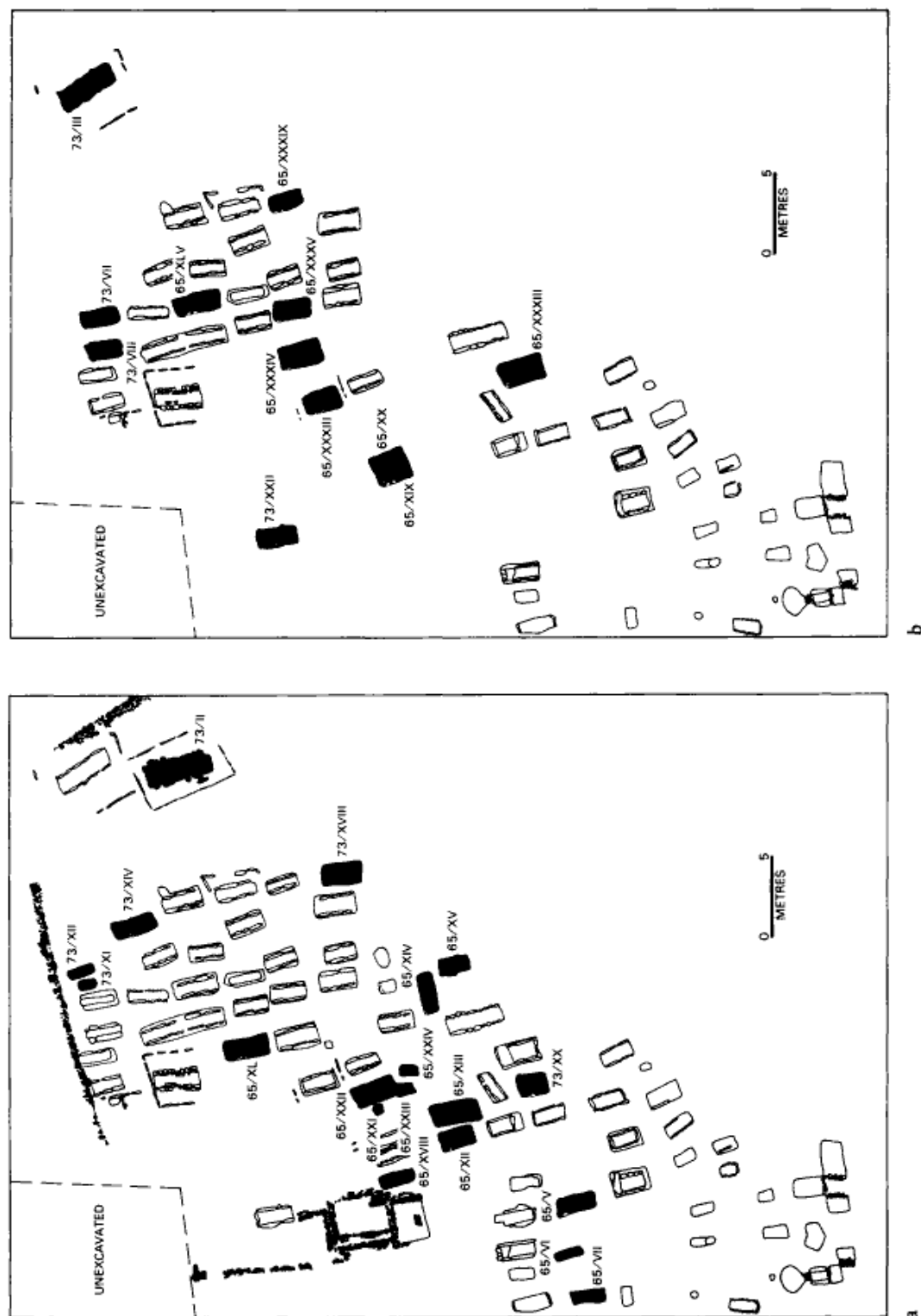


Fig.25. Anavyssos, Ag. Pandeleimon cemetery: Late Geometric I graves. (a) Late Geometric Ia; (b) Late Geometric Ib. In each case, earlier graves are shown in outline, new burials in black. Some graves from the 1966 excavation appear on the published plan twice



datable only as Late Geometric II). There were probably about 25 burials of adults, representing a 'community' of 14.3–25.0 people. This is a slight decline on Late Geometric I, but again the elasticity of the chronology can easily absorb the difference.

Towards the end of Late Geometric II, this cemetery went the way of the Athenian graveyards, being invaded by subsidiary infant and child burials, with the number of adult graves falling rapidly. The cemetery never went over solely to child burials, however; the latest child graves are about contemporary with gr.73/XX, in the early seventh century.

The poorly published 1967 and 1968 excavations at Merenda produced many Late Geometric II adult burials, which were largely replaced by infant and child graves after 700. This is also true for Eleusis, where adult graves continued in small numbers in the South Cemetery in the seventh century, but nearly all the Late Geometric IIB graves belong to the very young (Cavanagh 1977, Catalogue, 189–200).

Protoattic

All type A plots and cemeteries were very small in Protoattic. At the Kerameikos, there is a clearly definable plot spanning the first half of the century in grs. A 1–8, representing an adult 'community' of 3.2–5.6 members. There was probably a second plot, now destroyed, in the area immediately to the north, and a third has been found north of the Sacred Way, consisting of only two graves. In all, the cemetery population cannot have been above 10–15 adults; that is, in the same area as in Protogeometric to Middle Geometric.

On the north bank of the Eridanos, two plots of a similar size have been found; and Kübler stresses that the 1863 and 1900 excavations found no graves in this area, and that the original total of burials cannot have been much greater than those he and his successors have been able to excavate (Kübler 1959, 1 and 8). Some way to the south, two Protoattic primary cremations have been found beneath the Classical building Bau Zeta. The cemetery here was also very small (U. Knigge, pers. comm. 1983). The plot size of three to five adults, with a cemetery of ten to fifteen, found in the Ag. Triada area, seems to be fairly typical for the whole Kerameikos area.

Other cemeteries were equally small – just two or three graves survived at the Olympieion (J. Travlos, pers. comm. 1983), just gr.1977/7 on Sapphous St, and perhaps gr.II3 marked on the plan of the 1967 Kriezi St excavation.

It is worth considering the possibility that the cremation graves typically represent the remains of more than one individual, as was the case in a number of primary cremations dated c.625–575 BC at the site of Vroulia on Rhodes (Kinch 1914). The recently published Sapphous St gr.1977/7 was certainly used twice, once in Late Geometric and again in Archaic times, and this may have been discovered only because vases were placed with both burials. In the Kerameikos, vases were rarely placed with the graves, nor has it been possible to examine the skeletal remains (Kübler 1959, 83–5). However, it is highly unlikely that repeated cremations could have gone unnoticed in such an outstandingly well conducted excavation. Kübler noted stratification in many of the cremations, but this was the result of a *single* funeral, not repeated burials, and this line of argument is untenable.

Outside Athens, the largest published Protoattic groups come from the East Cemetery at Vari. No more than ten graves can be dated to Protoattic, although some more were found here earlier by Stais. The Protoattic graves, if they all form a single plot, represent a group of 2.7–4.7, like the contemporary A1–8 group at the Kerameikos. The excavated area of the Vari North Cemetery came into use only at the end of the seventh century.

A more recent excavation at Votanikos uncovered an area of 700 square metres, and found twelve Archaic graves in two plots, although it is not clear how many were in each group. Gr.K 10 dated to the early seventh century, gr.T 6 to the early sixth, and grs.K 2 and 6 around 550; the other burials are not given dates. For the whole period c.700–550 BC, both plots combined average 1.6–2.8 adult contributors.

Similar dating problems affect the D 52 cemetery at Thorikos, from which fourteen adult graves have been published. Further burials were found here in 1978 and 1979 (Bingen 1984, 73). If we assume twenty adults spread over the seventh century, the average size for the whole cemetery would have been 4–7 adults, with some smaller plots perhaps discernible by orientation.

At Tavros, the two graves discovered in trench K 23 can give no idea of the size of the cemetery; similarly, only tiny groups have been uncovered at Anavyssos, Draphi, Eleusis, Kalyvia Kouvara, Merenda and Spata. The 'community' represented by the type A cemeteries was obviously very small, but large type C cemeteries have been found at the Academy, Eleusis, Phaleron and Thorikos. At Phaleron, probably about 100 graves were excavated in the same cemetery by Kourouniotes and Pelekides, with still more graves in an unexcavated area to the south. This cemetery belongs to a sizeable group, probably in the region of at least 25–40 adults contributing their child mortalities.

Transitional and Black Figure

Already in the Transitional period, plots and cemeteries were starting to get larger again. In the Kerameikos Ag. Triada cemetery, 41 graves belong to this phase, representing a 'community' of 16.4–28.7 adults. In Black Figure, there are 35 to 40 adult burials, giving a range of 17.8–31.1 buriers. The size of the individual plots is hard to determine, because the area was very full in the sixth century. Some peripheral plots can be identified with ease (e.g. grs.A 42–5; 46–51), consisting of about five burials made over about 20 years. The plots in the centre of the cemetery may have been larger. The Agora Archaic cemetery seems to be a group of perhaps 14–20 adults burying together in Black Figure times. Here too plots are very hard to differentiate.

For other excavated cemeteries, we must turn to the Attic country. The North Cemetery at Vari is not well published, but probably represents a group much the same size as those using the Athenian cemeteries. It is considerably larger than the Protoattic cemetery, but exact numbers are not available. It is equally hard to identify separate plots.

The tumuli at Petreza, Vourva and Velanideza represent single plots, of 5–8 adults; that is, a similar size to the Kerameikos groups.

In spite of the poor publication of most sixth-century cemeteries, it is clear that they

were growing in size, and certainly by c.550 BC they were generally considerably larger than Protoattic cemeteries.

Early Red Figure

The increase in the size of the groups using the cemeteries in the late sixth century is very striking. The well published Ag. Triada and South Mound areas of the Kerameikos represent groups of at least 36–63 and 21–37.5 adults respectively across the whole period c.525–400 BC. The Diocharian Gate cemetery, while no doubt broken up, like the Kerameikos, into smaller areas, has produced well over 300 burials of the late sixth and fifth centuries from rescue excavations alone.

The type B cemeteries excavated in rural Attica are, as we might expect, rather smaller, and numbers are generally vague in the reports. The fairly thoroughly dug group at Draphi was probably a plot in the order of 11–20 adults in the late sixth and fifth centuries (assuming 70 burials of these dates from the plan published by Daux (1958, 680)).

The size of plots varied. In the Kerameikos, the largest late sixth-century plot is that on the south side of Mound G, with 6.4–11.2 adults. This was also the average size of plots throughout the fifth century; there were spatially distinct knots of 30–40 graves each, with adults and children segregated, but placed near each other. The pattern established in the late sixth century was that current in Classical times. Elsewhere, groups may have been smaller, and children and adults could be buried together, as on Peiraios St and at the Diocharian Gate. Rather smaller plots still have been found in the Attic countryside at Liopesi and Sounion, of between four and eight adults.

The norm in the late sixth century was a plot of less than a dozen adults burying together, usually placing their dead in large cemeteries. At Athens, these may have received the burials of thousands of people. The excavated areas of these huge cemeteries at the Kerameikos and Diocharian Gate each represent the graves of a contributing group of 60–80 adults – a very substantial increase over the seventh and earlier sixth centuries.

Conclusions: kinship and demography

As we have seen, total numbers of adult graves, cemetery sizes and plot sizes fluctuated in tandem between 1100 and 500 BC. The data are summarised in table 6, and the correlation between adult plot and cemetery sizes is shown in figure 27. The correlation is certainly not strong, but given the parameters of age at death, the constant possibility of partial excavation, and the inherent demographic tendency towards variation, this is not surprising. Figure 28 is an attempt to create an *impression* of the changes, which I hope is not too misleading. This revelation of parallel changes at all levels is of some significance; increases in total numbers of graves do not represent simply more cemeteries or more plots within them, and the same applies to the falls in numbers. In some periods, numbers of cemeteries do change – for example, there is an increase around 750, and a decline after 700 – but in all cases changes operate from the level of the plot upwards.

It is therefore very important to consider the types of social groups represented by the

Table 6. *Sizes of adult groups contributing to excavated cemeteries and grave plots*

Period	Cemetery	Types A and B:		Type C group ¹
		Cemetery	Plot	
SM	Kerameikos	230–53	5–8	—
	Salamis	230–50	25–8 ²	—
	Olympieion	—	—	2–3
	Acropolis	—	—	4–6 ³
	Kolonos Agoraios	—	—	1–2 ⁴
PG	Kerameikos	9–16	c.2	—
	Nea Ionia	—	c.2	—
	Kolonos Agoraios	—	—	1–3 ⁴
	Nymphaeum	—	—	1–2 ⁴
	Vas. Sophias Avenue	8–15 ⁵	?	—
EG/MG	Kerameikos	6–10	c.2	—
	Areopagus	24–7	c.2	—
	Anavyssos	10–15	c.2	—
LG I	Peiraios St	19–34+	6–8	—
	Anavyssos	22–39	12–20	—
LG II	Agora Tholos	—	4–6	—
	Kerameikos Plattenbau	—	9–12 ⁶	—
	Anavyssos	14–25	7–10	—
	Agora Tholos	—	4–7 ⁷	—
	Thorikos D 52	—	9–15	—
PA	Kerameikos	10–15 ⁸	23–6	—
	Votanikos	?	1–2 ⁹	—
	Thorikos D 52	4–7	?	—
	Phaleron	—	—	25–40 ¹⁰
Trans.	Kerameikos	16–29	24+	—
	Velanideza	—	1–2 ¹¹	—
	Vourva	—	1–2 ¹¹	—
	Phaleron	—	—	25–40
BF	Kerameikos	18–31	25+	—
	Agora ¹²	14–20	?	—
ERF	Kerameikos, Ag. Triada	36–63	6–11	—
	Kerameikos, S. Mound	21–38	6–11	—
	Diocharian Gate	260–80	24–6	—
	Liopesi	—	3–6 ¹³	—
	Sounion	—	3–5 ¹⁴	—
	Draphi	11–20 ¹⁵	?	—

NOTES

1. Calculated by assuming 50% child mortality and one child growing to maturity for each in the cemetery.
2. Taking the 7 rows as plots.
3. All four areas of burial are included here.
4. Badly damaged by erosion.
5. Assuming the graves span the whole of PG.
6. Assuming 6 graves destroyed by the Roman tomb.
7. LG IIa only.
8. Probable original figure.
9. Assuming an equal number of graves in each plot.
10. Assuming 100 graves dated c.700–750 BC.
11. Chronology uncertain; I follow Kübler (1959).
12. Agora Archaic Cemetery.
13. The graves span c.550–500 BC.
14. The graves are dated only as Archaic; I assume this date on the basis of a Black Glaze skyphos from pithos gr.4, but acknowledge that this assumption may not be justified.
15. From Daux (1958, 640).

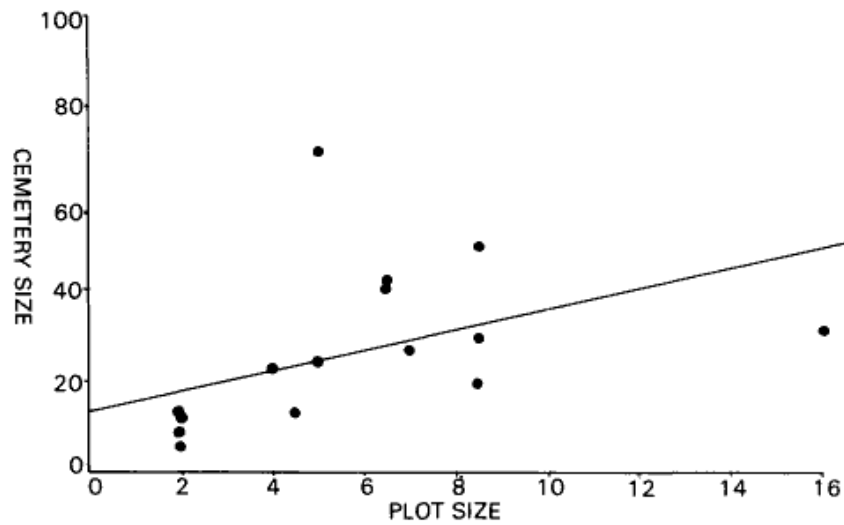


Fig.27. Correlation of adult plot and cemetery sizes, using the data presented in table 6. The estimated regression line ($\hat{y} = 13.9 + 2.26x$) is calculated by the least squares method and accounts for 21% of the total sum of the squares. X and y are in a linear relationship significant at .05 with $n-2$ degrees of freedom; the correlation coefficient $r = .46$, also significant at .05

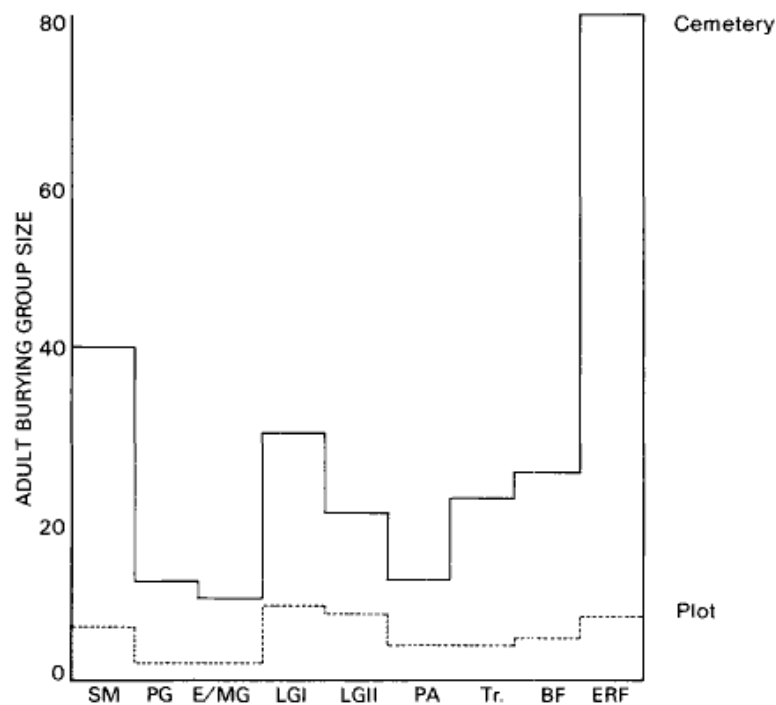


Fig.28. An impression of the general parallel changes in adult plot and cemetery sizes in Attica

plots. Our explanation of the changes in size of the various burying groups, from the plot through the cemetery to the whole site, must operate at all levels, and for this we must first know something of the nature of the groups.

The sources discussed in Chapter 3 suggested that from Homer to the fourth century membership of burying groups was determined by kinship. In Classical Athens, plots were filled by the members of shallow patrilineages, burying patrilocally (Demosthenes 43.79–80; 55.13–14; 57.28), with responsibility for burial devolving upon the deceased's bilateral kindred as far as the second cousin (the group called the *anchisteia*: Demosthenes 43.57–58. See Humphreys 1978, 197–200; Littman 1979, 26–8; Lacey 1980, 28–9). This pattern, known as complementary filiation, is very common in societies with complex structures of kinship (Fox 1967, 132–3), and Sally Humphreys has suggested that it was always at the core of Greek kinship systems (in Rowlands 1980, 17). The Greeks perhaps inherited a 'proto-Indo-European' patrilineal and patrilocal kinship structure (Friedrich 1966; Barlaam 1976), which might be detectable in the Linear B texts, and is certainly visible in the eighth century and later literature (Humphreys 1978, 196). However, some caution is necessary with arguments of this kind.

Some form of descent group lies behind the grave plots of the Dark Age and the Archaic period, as in Classical Athens, with larger kin/residential groups behind the cemeteries and whole groups of cemeteries at a particular settlement. In a relatively undeveloped society like early Iron Age Greece, it seems implausible in the extreme to suggest anything other than kinship as the organising principle behind the majority of the burial groups (although there will probably always be a few exceptional cases). Descent group burial plots only began to be rivalled in the second and first centuries BC, with cemeteries for some Hellenistic Greek *koina* and later some Roman *collegiae* ('burying clubs'). Even then, however, kinship remained the most important factor in the majority of cemeteries (Fraser 1977, 58–60; Hopkins 1983, 212–17), and a kinship basis seems certain for the eleventh to sixth centuries.

The burial evidence itself offers no clues to the structure of the burying groups, and we must look to the literary sources. The Classical Athenian burying groups have a number of features in common with what Sahlins (1957, 292–6) has called the 'truncated descent line', a localised group fissioning easily and not placing much emphasis on genealogical distance from a founder. After fissioning, ties between such groups rapidly weaken and dissolve, with the new groups being independent of the founder lineage (what Firth (1957, 7) called definitive segmentation, or gemmation). In fourth-century Athens, descent groups three or four generations deep were usual. Such groups retained the name *oikos*, which was also used for the nuclear household, and consisted of the households of sons tracing their descent back patrilineally to the senior male of a single founder household (Demosthenes 43.19; see Lacey 1980, 128–30). On reaching the third or fourth generation (assuming the lineage reproduced itself successfully to that stage) the group tended to fission, the households each setting up a new wider *oikos*.

Truncated descent lines are commonly associated with regions where ecological resource zones are closely clustered, so that a single domestic group can take part in a whole range of productive activities, without a need for central redistribution (Sahlins

1957,294; Wolf 1966b,3). From Homer onwards, and probably from much earlier still, the nuclear family was the principal unit of production (Finley 1978, 57–60). The ecology of much of Greece, with a variety of micro-environments within easy reach, would be perfectly suited to this form of adaptation; and Hesiod (*Works and Days* 345–6) seems to assume that each village would contain several kin groups. It is perhaps significant in this respect that the vocabulary of Homeric and Hesiodic kinship terms is largely limited to the extended family; even words for ‘cousin’, such as *anepsios*, seem to have been rather loose in application (Donlan 1985, 301). Detienne’s claim (1963, 24) to see an earlier ‘stratum’ of extended family residence in the Homeric legend of the division of the cosmos between Zeus, Poseidon and Hades (*Iliad* 15.174–210) and in Hesiod’s *Theogony* (603–7) is a weak one; indeed, Hesiod’s warning that avoiding marriage condemns an old man to lack of support in his decrepitude seems to suggest that he took the nuclear family as the norm.

The *oikos* is the basic kin unit in Homer, often conceived as an extended group three generations deep, like the fourth-century Athenian wider *oikos*, and like the Iron Age burying groups. The Homeric *oikos* might be built up through alliances, with subsidiary individuals and households becoming permanently attached to more powerful households in patron–client relationships, expressed by the poet in the language of kinship. Such relationships can perhaps be observed in Hesiod (Ern. Will 1965, 527).

Kinship units of this type presumably lie behind the burying groups in Iron Age Greek cemeteries. By Classical times, the Homeric style of patronage was no longer so important, and we might hypothesise a gradual development from the Homeric to the Demosthenic *oikos* behind the continuity at the level of the three generation deep burying groups. At all times, though, the burying groups would be vertically divided units, cross-cutting rank distinctions in society. As such, they would be similar to Forrest’s model of ‘pyramids’ (1966, 48–50) and Donlan’s *phula* (1985,304). At the head of each group would be an aristocratic household of sorts, with a number of lesser households attached. These would perhaps have shared common ritual activities, controlled by the aristocratic family. As time went by, some groups would fission as the number of households within them became unwieldy, the original lineage rapidly disappearing, while other lines might fade away as their numbers declined, being absorbed into other groups. Some aristocratic households might gradually lose their wealth and ability to take a leading role in ritual; while other houses, growing wealthy (as Hesiod urges Perses to do in the *Works and Days*), might rise to the status of aristocrats, becoming dominant in their own lineage. The wealth and power of the dominant households would vary. For instance, Hesiod’s audience was assumed to have dependent houses, and yet was itself subordinate to a group of stronger *basileis*.

Descent groups obviously vary in size. In peasant communities, there is a tendency for richer families to be more numerous, while in the Homeric-type *oikos* power depended largely on the number of dependent retainers (Finley 1978, 59). We must therefore expect some variation in the size of contemporary burying groups, which can be seen in table 6.

The important point here, though, is diachronic variation in the typical size of plots:

why do plots belong to individual households in Protogeometric to Middle Geometric and most of Protoattic to Black Figure, and to larger groups in Submycenaean, Late Geometric and Early Red Figure? If we follow the line that changes in total numbers of graves represent changes in population size, the corresponding changes at the plot and cemetery level become difficult to explain. None of the obvious explanations in fact seems adequate.

1. Simply arguing that plots grew in Late Geometric because family sizes increased is insufficient, since it is the Submycenaean/Late Geometric/Early Red Figure plot size, with the supra-familial descent group, which we *expect* to observe; it is the absence of the wider *oikos* in Protogeometric to Middle Geometric and Protoattic to Black Figure which must be explained.

It could be argued that a kinship group of the type of the wider *oikos* existed in Submycenaean times, but then just at the time that population fell, c.1050 BC, this kinship unit disappeared. Around 750, when population rose again, the supra-familial group returned, only for the changes to be repeated c.700 and 510 BC. While drastic population change can influence kinship structures, it is probably only at the level of 'negative determination' (e.g. Godelier 1975), and even Camp's devastating drought would not have ruled out the Athenian *anchisteia*. This argument requires a chain of implausible coincidences, and it is further weakened by the improbability of major changes in Athenian kinship structures, particularly the absence of the multi-family lineage, between 800 and 500 BC (see Humphreys 1978, 197–8).

2. The coincidences can be avoided by arguing that the population did not go up and down, and that the changes in burying groups are the result of kinship changes alone. This would require there to be more, smaller plots in the cemeteries c.1050–750 and 700–510 BC. In fact, numbers of graves within the cemeteries and the total numbers of cemeteries both fall in these periods; and the problems of accounting for radical changes in the Archaic kin groups are just as great as in the first explanation.

3. It might be suggested that kinship structures remained fairly constant, but that the wider *oikoi* were incorporated into large cemeteries of several lineages only in Submycenaean, Late Geometric and Early Red Figure – that is, that the groups of graves which I have been calling 'cemeteries' in Protogeometric to Middle Geometric and Protoattic to Black Figure are in fact equivalent in their kinship basis to those groups described as 'plots' in the discussion of Submycenaean, Late Geometric and Early Red Figure. If this were the case, however, we would expect to find more of these Protogeometric to Middle Geometric and Protoattic to Black Figure burying groups, unless improbable simultaneous changes in population and kinship organisation are again suggested. In fact, it is precisely in the periods Submycenaean, Late Geometric and Early Red Figure that there are more cemeteries, as well as more graves within them.

4. Perhaps kin groups remained constant, but membership of the descent group was not symbolised spatially at all times. This idea also falls down in that it cannot explain the changes in numbers of graves within cemeteries or the total numbers of graves, without again introducing implausible coincidences – this time population growth accompanying the spatial expression of the descent group, and population decline co-

inciding with the abandonment of the spatially distinct group. Renfrew's argument (1976) linking population pressure to formal cemeteries cannot be invoked to support the case, of course, since the multi-lineage cemetery remained constant throughout these changes, and was in fact more formal in Protoattic to Black Figure than in Late Geometric (see Chapter 8). Further, there very clearly are spatially organised groups within the cemeteries at all times, which must be explained; and some of the small, spatially distinct Middle Geometric and Black Figure groups can be seen to develop directly into the larger groups of Late Geometric and Early Red Figure. This is clearest at Anavyssos and in the Kerameikos; while at Thorikos, the small seventh-century cemetery in the D52 area seems to grow directly out of the Late Geometric II area. This explanation of the changes is also unable to account for all the demographic features observed.

Conclusions: rank

The problems of explaining the pattern in the size of the burying groups are considerable. Certainly changes in population size or kinship groups alone cannot account for the data, and any combination of factors not only demands an implausible chain of coincidences but also leaves significant features unaccounted for.

To a great extent, the changes in the size of the adult burying groups coincide with the changes in the age structure of the burying groups. I argued in Chapter 4 that at some times infants and children were excluded from formal, archaeologically visible burial; and here I wish to extend the argument to account for the changes in the adult membership of the cemeteries. Perhaps in Protogeometric to Middle Geometric and Protoattic to Black Figure, the cemeteries represent a smaller proportion of the adult population of Attica than in Submycenaean, Late Geometric and Early Red Figure. Following on from the discussion in Chapter 3, I will suggest that exclusion was practised on the basis of *rank*. By rank, I mean the hierarchical ordering of individuals into positions of superordination and subordination. Rank groups refer to status positions of power and authority not open to all members of society who have sufficient talent to occupy them. This definition modifies Fried's (1967, 52 and 189), which was designed to exclude those societies where rank is based solely on age or sex. The appearance of ranking within age and sex groups encompasses and redefines the 'biological' principles of social differentiation rather than replacing them, and in ancient Greece age and sex were always very significant factors.

Given the attitudes expressed from Homer to Plato (see Chapter 3 above), exclusion from formal, archaeologically recoverable burial could only really have been based on rank. The literary evidence is therefore of the greatest importance here, since it would clearly not be justifiable simply to assume that more formal (archaeologically visible) burial meant higher status. In some cultures, this would not be so. To take an 'archaeologist's nightmare' sort of case, on Bali until recently the highest-ranked individuals were exposed without any subterranean disposal facilities, while the rest of the population were inhumed in simple pit graves. The wealthier members of this group would later be exhumed, cremated, and their ashes would be scattered on the sea (Huntington and Metcalf 1979, 86 and 130). Consequently, only the poorest members of

society would be visible to the archaeologist. Wait has recently argued that the few deposits of human remains known from Iron Age south central England represent unclean deviants, while the rest of the population vanished completely without trace (Wait 1985, 120).

If formal, archaeologically visible burial were restricted to those of high rank at some times, this could account for the demographic fluctuations described above. The supra-familial kinship groups could have remained fairly constant in size and structure, and changes in burying group size need not be linked to implausible simultaneous changes in kin groups and population. The small cemeteries composed of small burial plots in Protogeometric to Middle Geometric and Protoattic to Black Figure would then represent just the highest-ranked individuals, almost always adults, in each descent group; and when restrictions on access to formal burial were lifted, and 'commoner' households were allowed to bury with the higher-status houses within their descent line, then the plots within cemeteries, the cemeteries themselves and the total number of Attic graves known all grew together. Adopting the terminology of the early Greek poets, I will refer to those always represented in the archaeological record as *agathoi*, the 'good people', and to those sometimes excluded as *kakoi*, or 'inferiors'. This model of the changing membership of the burying groups is shown graphically in figure 29.

If we are to pursue this line of argument further, we must have a more precise idea of just who the *agathoi* and *kakoi* are supposed to be. This is of course rather difficult. The only way to approach the problem seems to be through the relative numbers of those given formal burial and those excluded, but this raises many problems. Comparison of plot sizes from the eleventh to fifth centuries suggests that the *agathoi* were at all stages a fairly considerable group of people; I would guess (and it can be little more than that) from the relative numbers that this 'elite' group varied between 25% and 50% of the adult population. It is hazardous to make such an estimate, but it has important consequences for later stages of the argument. This provides only a rough order of magnitude, since the actual proportions must have fluctuated considerably through time, but it nevertheless suggests that the *agathoi* were quite a wide group, rather than a narrow company of nobles like the *basileis* in Homer and Hesiod, or the *eupatridai* ('the well-born ones') in Archaic Attica. Equally, those given formal burial could not be a small deviant group; an important part of Wait's case about the British Iron Age burials was his calculation that the skeletal remains represent only about 5% of the ancient populations (1985, 90). The Attic *agathoi* presumably included large numbers of well-off peasants, like Hesiod himself, as well as the nobility (and I assume that there *was* a Dark Age nobility); these peasants were *agathoi* in that they were landowners with dependent households, but they were not members of the subgroup which governed, and, as the Archaic literary sources show, they were heartily despised by this governing elite.

My use of the words *agathoi* and *kakoi* might cause some confusion, since Starr has already appropriated *kakoi* as a word for the non-governing elite. He rightly places Hesiod in this category (1977, 123–8), although he was surely mistaken in casting him in the role of an aristocrat fallen on hard times. As Millett points out (1984, 88–90) Hesiod was very much a peasant in his relationship with the *basileis* and in his outlook on the world, even though he clearly had his own dependents and a certain amount of wealth.

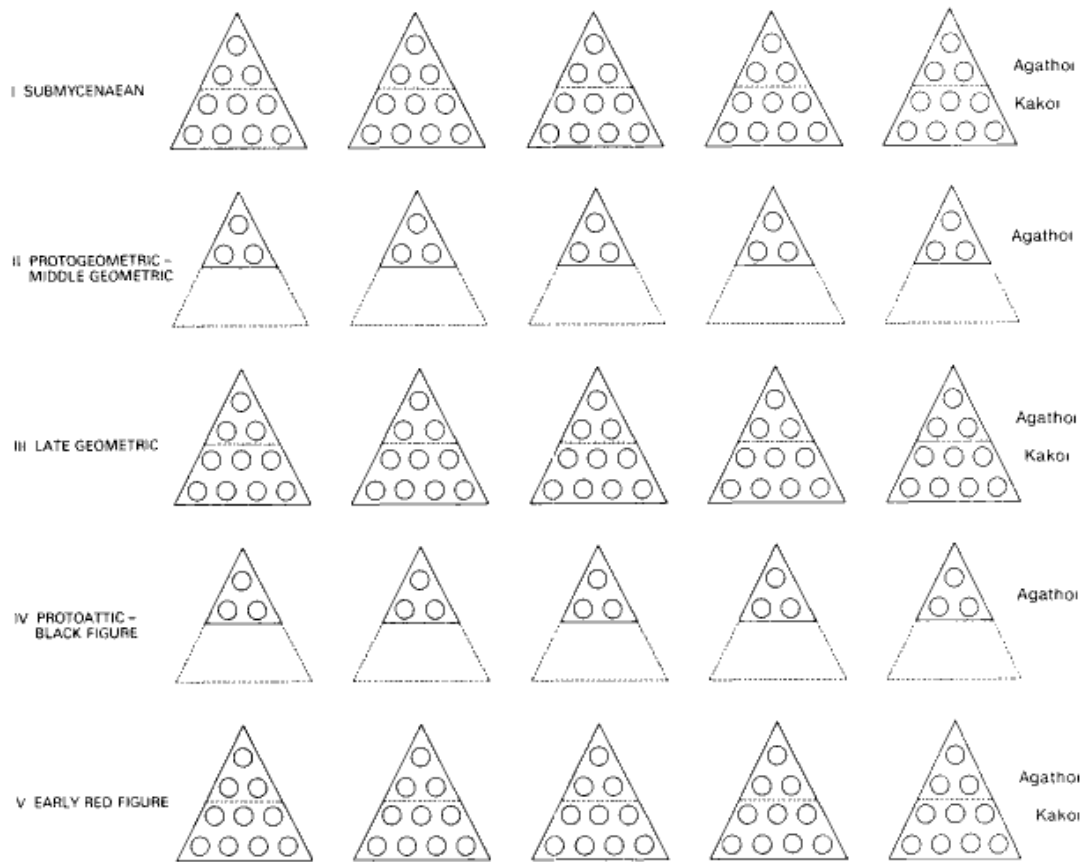


Fig.29. A schematic representation of the hypothesised changes in the membership of adult grave plots and cemeteries, 1100–500 BC. Each triangle stands for a descent group's burial plot, within a model 'cemetery' of five such plots. In phases I, III and V (Submycenaean, Late Geometric, Early Red Figure) all members of the descent group bury together, and the population of the cemetery is fifty adults; in phases II and IV (Protogeometric to Middle Geometric and Protoattic to Black Figure) only the agathoi within each plot are given formal burial, while the kakoi are disposed of elsewhere. The typical plot size falls from ten to three, and the cemetery 'population' from fifty to fifteen, even though the population of the group itself remains the same

What this interpretation of the burials suggests, then, is that the most important distinction within the ideal structures of Protogeometric to Middle Geometric and Protoattic to Black Figure Attic society was that between the agathoi, a group which included both aristocrats and wealthy but non-governing peasants, and the kakoi, the poor. Certainly there was probably friction between the nobles and wealthy peasants who felt they were unfairly excluded from political power, and who doubtless tried individually or collectively to enter the governing group, as in early Rome; but I will argue in Chapter 10 that the main dynamic in the rise of the polis was the struggle between the whole group of agathoi and the kakoi.

I am suggesting here a social structure similar to Pareto's classic formulation:

- we get two strata in a population: (1) A lower stratum, the *non-elite*, then
- (2) a higher stratum, the *elite*, which is divided into two: (a) a governing *elite*,
- (b) a non-governing *elite*.
- (cited from Bottomore 1964, 8)

There will have been important differences between the social structures of 1050–750 and those of 700–510, but I think this simple model provides a good starting point for the analysis in the next chapters. Within the agathoi burying groups of Protogeometric to Middle Geometric and Protoattic to Black Figure, then, we should expect to find a considerable range of status positions, although of course a narrower range than in Submycenaean, Late Geometric and Early Red Figure, when a large lower stratum should also appear.

The idea that formal burial was at some times restricted by rank certainly accounts for the changes in both the age structures and the size of the adult burying groups, but it raises as many problems as it solves. The very possibility of exclusion from formal burial may seem alien to many Classical archaeologists, and indeed the assumption that the recovery of the living population through their burials remains constant underlies Snodgrass' and Camp's demographic arguments.

Snodgrass makes his position clear in a very explicit passage, raising a number of objections which must be met if exclusion is to be accepted.

The most acceptable route of escape from the conclusion of depopulation [in the eleventh to eighth centuries] might be that there is some hidden selectivity in the burial-practices of Greece which operates only between 1100 and 800, and leads us to underestimate the numbers of burials and indeed to overlook whole sites for the disposal of the dead. Some such practice as exposure of the dead, to the total exclusion of burial, would meet the case. But there is no shred of positive evidence for such a custom; and furthermore we can point to the fact that the cemeteries which we do have represent a fairly complete range of ages and sexes, while their general poverty is such as to make it an almost laughable claim that they should represent any kind of elite or privileged group.

(Snodgrass 1980, 21; see also 1977, 12)

However well a theory of exclusion may accommodate the demographic patterns, it must still be able to answer such a position. In the next three chapters, I will attempt to test the argument advanced above.

Exclusion and retrieval

The problem posed in this chapter is how to test the argument for exclusion on the basis of rank against the archaeological record. A number of criteria have been suggested for the study of the rank structure of cemeteries, such as levels of energy expenditure (Tainter 1977; 1978) or the distribution of badges of office (Brown 1981), which should display a pyramidal structure (Peebles and Kus 1977). However, approaches of this sort are not designed to cope with the problem of the exclusion of rank groups; and each is also open to criticism for attributing specific meaning to an isolated part of a functioning symbolic system (see O'Shea 1984, 15–21).

The problem of restrictions on the use of formal burial is widely recognised by archaeologists, but few solutions have been offered. Peebles and Kus (1977, 431) suggested that exclusion by age often occurs along with restrictions on the range of adults admitted to a cemetery. While the periods when sub-adults are under-represented at Athens do coincide with those for which under-representation of adults has been suggested, it would of course be rash to assume that an uneven age structure *necessarily* indicates a restricted adult group.

A second approach is to compare the number of adult burials with the probable population of the settlement providing the dead (O'Shea 1984, 27). If there are too few burials, then the archaeologist might infer invisible disposal of parts of the population if no other factors of retrieval seem to have played a role. However, this applies only at the relatively few sites where we can be sure that all the burials originally made have been discovered. Where there is a skewed age structure *and* this type of under-representation, there are good grounds to argue for exclusivity in the use of formal burial.

The only Attic site where such an approach is feasible is Lathouresa, but even here there are great problems. Lauter's estimate of 80–100 residents (1985a, 74–7) is wildly exaggerated. The total roofed area of the settlement was probably originally about 400 square metres, divided into perhaps six or seven structural units. The relationship between roofed area and settlement can be complex (e.g. Whitelaw 1983, with full references; Colb 1985), but the community is unlikely to have exceeded 30–40 people at its height. Lauter further suggests that the site was only very briefly occupied at the end of Late Geometric (1985a, 69), but there is no evidence for this. If the settlement was used for two centuries (as the excavator suggested – Walter 1940, 176–7) by an average of thirty people, with a death rate around 30 per 1,000, they should have produced some 180 burials. The site's cemetery has been discovered, with a single large (sixth-century?) mound (Lauter 1985a, 64). Verdelis excavated nearby (1966, 96), but found no more Geometric or Archaic burials. It seems quite possible on the basis of present evidence

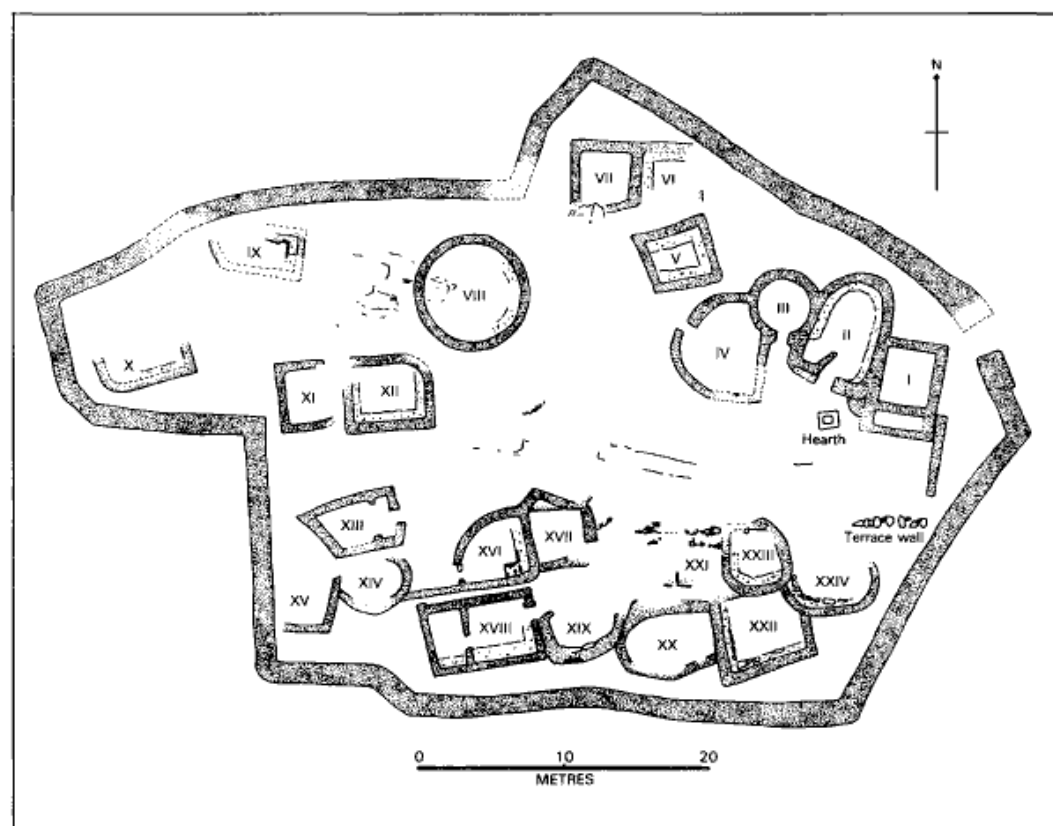


Fig.30. Architectural remains at Lathouresa (after Lauter 1985a, fig.1)

that the Lathouresa cemetery includes only a small proportion of the population of the settlement, but this cannot be regarded as very secure.

Being such a small settlement, and for all we know not necessarily even permanently occupied, Lathouresa is not a very good case from which to argue. The best example would of course be Athens, but unfortunately only a small proportion of Athenian burials have been found for any period of the distant past. This is hardly surprising, in view of the long occupation of the site. A direct comparison of numbers of burials and the population is therefore out of the question. What we can do, though, is to calculate the *rate of recovery through burial* of the Athenian population in the periods for which we have reliable evidence on the size of the group contributing to the cemeteries. Plato states that the population of Athens in prehistoric times was 30,000 (*Critias* 112D), but it would be very unwise to assume that he could have known this. The first period for which an estimate is possible is the fifth century BC. In what follows, I will calculate the rate of recovery through their burials of the fifth-century population. It will then be seen that if the same recovery rate is applied to the Archaic graves, tiny population figures result. Although we know little about Archaic Athenian population, levels of about 1,900 people in the late seventh century and 3,900 under the Peisistratids are totally unacceptable. It will therefore have to be concluded that shortly before 500 BC, the burials at Athens suddenly began to represent a much larger proportion of the popu-

lation. That this is true of the age structure of the cemeteries has already been documented. The rest of the chapter will be given over to the argument that this change in representation is not a product of retrieval problems, but is an artefact of ancient behaviour; and finally, the question of identifying the material remains of informal disposal of the dead will be addressed.

Burial and population at Athens

Because reliable external evidence is necessary to estimate the population contributing to the cemeteries, only the change in burial patterns c.500 BC can be conclusively documented. It seems very likely that the developments of c.700 BC must be seen as the beginning of a period of restrictions on access to formal burial, but this cannot be directly demonstrated in the same way.

We can establish, within rather wide limits, the population resident at Athens and using the cemeteries there in the fifth century, and therefore a rate of recovery through burials for fifth-century Athens. The first question to ask is whom the burials of the fifth century belong to. The answer must be the population resident within the city walls (on residence and burial, see Osborne 1985, 130–1). The other Attic settlements, including those near Athens, all seem to have had their own cemeteries. Even after 413 BC, when the Spartans occupied the site of Deceleia and (according to Thucydides) the population of Attica was confined all year round within the city walls, cemeteries continued in use all over Attica.

Next we need to know the size of the resident population. The traditional approach, via the literary sources, is full of problems. The best figures preserved are for military strengths. Gomme (1933, 25, n.2) argued from Herodotus' implications that a warship had a crew of 200 that there were 35,000 citizens at the time of the battle of Salamis in 480 BC (Herodotus 7.184; 8.17). However, it is not certain that the crews were always so large, or that all of them were Athenian citizens. The controversial 'Themistocles decree' implies only 115 men per ship, and some of these aliens (C. Patterson 1981, 48–9). However, the decree's use is disputed; it is a third-century BC inscription, and it is not clear whether it really is a copy of a stone of 480 BC, or whether it is a forgery (here we are in the dangerous area of 'intentional evidence'). Beloch (1886, 62) suggested a lower figure of 30,000 citizens in 480, in line with another statement in Herodotus (5.97), although some would see this as a purely conventional figure (e.g. Meiggs 1964; C. Patterson 1981, 51–6; Hansen 1986, 26).

Thucydides (2.13.6–8) gives strengths for the Athenian army in 432/1 BC. Similar figures are offered by Diodorus Siculus (12.40–44), but it is not clear whether his source was Thucydides or Ephorus (Gomme 1927). Beloch (1881, 65–6) at first wished to emend Thucydides' text to give a lower figure, but later recanted (1905); and, by and large, most Classicists have accepted his figures, which suggest some growth in the citizen body between 480 and 430. Gomme suggested 43,000 citizens in 431 (1933; 1956, 33–9; 1959), and Ehrenberg 35,000–45,000 (1969, 32–9). Such calculations involve untestable assumptions, but still command wide agreement (e.g. Hansen 1981).

The dangers inherent in the use of these occasional figures are obvious (see Hollingsworth 1969, 49–52; Hansen 1986, 16–24, 36–45), and they increase when we

attempt to calculate the resident population at Athens as a whole. To reach the size of the families of the citizens, Gomme simply multiplied his army figures by four; and the next step, assessing the non-citizen population, is even more hazardous. We simply have no idea of the number of slaves and resident aliens in fifth-century Attica, and Gomme's total figure of 315,000 must involve a large margin of error.

There is no direct ancient statement about the proportion of the Attic population resident at Athens. Thucydides (2.16.1) says most of the Athenians lived in the countryside down to 431 BC, and in the fourth century Xenophon (*Hellenica* 2.4.8–9; 2.26) and Demosthenes (57.10) use similar formulations. Xenophon also says there were 10,000 households at Athens (*Memorabilia* 3.6.14), but this may be a conventional figure. These statements are not much help. Cynthia Patterson argued from the fourth-century quotas for representatives on the civic council that one-seventh of the citizens were resident at Athens (1981, 59), but, as Osborne points out (1985, 225, n.91), two of the six urban districts to which these data refer are Phaleron and Piraeus, so the quotas in fact imply that only one in nine citizens lived at Athens. If the ratio was the same in the fifth century, this would mean 19,000 members of citizen families at Athens in 431, using Gomme's figures. A fair sprinkling of slaves and aliens suggests a total in the area of 30,000–35,000.

This long argument is very tenuous. A sounder method is to work from the settled area and probable population densities. Of the 215 hectares within the fifth-century walls, about 120 were used for domestic settlement (Travlos 1960, 71–2), and extra-mural settlement was probably very limited.

Estimating population from settled areas involves many complicating factors, but the Athenian evidence is remarkably good. House sizes can be estimated with some precision, and the size of the typical residential group can be assessed from literary sources (Raepsaet 1973). Travlos put the population at 36,000, which would be 300 per hectare within the residential area, and 170 per hectare over the site as a whole. If anything this may be rather high; Russell (1958, 68) argued that ancient urban centres probably rarely had densities above 100 per hectare, and almost never above 200; and Fletcher (1981, 119–21) has suggested that density in large predominantly agrarian settlements tends to fall in something of a trough between the higher levels possible in very small villages or industrial 'super-cities'.

The population should probably then be put around 35,000–40,000 in 431 BC, and rather less earlier in the fifth century. Nearly 1,800 graves can be certainly dated to this period. Taking the death rate as 30 per 1,000 (note that the exceptional deaths of the plague years were not buried in the formal cemeteries (Thucydides 2.52.4)), the graves represent a proportion of about 1.7% of the resident population at Athens.

There are very few seventh-century graves. As pointed out in Chapter 4, sub-adults are under-represented, and for a valid comparison with the more balanced fifth-century cemeteries we should double the numbers of adult graves. For Protoattic, this brings the numbers up to 74 graves; that is, almost one each year for 700–625 BC. Using a recovery rate of 1.7%, we get a seventh-century Athenian population of 1,900. Extending the experiment to cover the period c.625–525 BC, for which there are 136 graves (which we

may round up to 200 to allow for the partial under-representation of the young) we get a population just under 3,900.

These figures are unacceptably small. Peisistratos holding court over less than 4,000 Athenians is a ridiculous thought. No demonstration could show more powerfully that the Athenian burials represent a much smaller proportion of the population of the seventh and sixth centuries than of the fifth. The significance of this conclusion should be apparent. Suddenly, just about 500 BC, the proportion of the Athenian population represented in formal, archaeologically recoverable burials expands to include not only a fuller age structure but also a much larger proportion of the adult population. Unfortunately, the lack of settlement evidence makes it impossible to extend this statistical argument back to the eleventh to eighth centuries, but it seems very likely that the beginning of the low representation should be identified with the fall in numbers of graves around 700 BC. If a recovery rate of 1.7% is applied to the Late Geometric graves, we get a population of about 7,000. This, I would suggest, is probably in roughly the right area; certainly few archaeologists would wish to push the population of Athens beyond 10,000 in the late eighth century.

For the great changes c.1050 and 750 BC, this computation can have no direct impact, in that it cannot be shown that the population of Athens definitely rose above about 1,300 during this period. However, the demonstration that changes occurred c.510 BC and very probably c.700 is suggestive, to say the least.

We have seen that the burials do not represent a constant proportion of the ancient population, but the argument must be taken a step further. It must be shown that the changes in representativeness result from different patterns of behaviour in the past, rather than from purely archaeological problems of retrieval and recognition.

Retrieval and recognition

In this section, I consider the possibility that the small numbers of Archaic and Proto-geometric to Middle Geometric graves result from our inability to discover or identify the material. As has been seen, there are fewer burials within the plots and cemeteries of these periods than in those of Submycenaean, Late Geometric and Early Red Figure, so what is being assessed here is effectively whether there were originally more cemeteries which have not been found and which date to Protogeometric to Middle Geometric and Protoattic to Black Figure than those which belong to Submycenaean, Late Geometric and Early Red Figure.

Further, what is interesting here is whether there is an inherent probability that cemeteries *of the types already known* are more likely to have escaped discovery in 1050–750 and 700–510. I stress this point because if it is argued that large cemeteries existed but of a type difficult to associate with the known cemeteries of these periods, then this in fact constitutes modified support for the argument of this book. For example, if it were suggested that in Protogeometric to Middle Geometric and Protoattic and Black Figure there were extensive cemeteries containing no material remains to date them, and which were therefore completely different from the known cemeteries, this would still mean accepting the argument that the adult population was divided into two classes, one

buried less formally than the other, while the distinctions between the two groups dissolved in Submycenaean, Late Geometric and Early Red Figure, when they buried together.

Figure 31 shows the distribution of excavations at Athens reported in *Arkhaiologikon Deltion* for 1960–78. By no means all these soundings reached Dark Age or Archaic levels, but it is at once clear that all parts of the city have been extensively sampled, and the area of the Early Iron Age settlements and cemeteries is frequently, if not systematically, explored. At some sites, it is easy to see how large areas have not been sampled, due to the pattern of modern building activity. The history of excavation at Athens, however, is such that movement of the areas favoured for cemeteries is unlikely to have had a very great impact on their discovery.

The relative visibility of graves of different periods is a more serious problem. ‘Visibility’ has several meanings here. One possible factor in the chance discovery of graves is the depth to which they were dug. However, apart from the observation that where cemeteries were used for a long time the earlier graves may be deeper than the

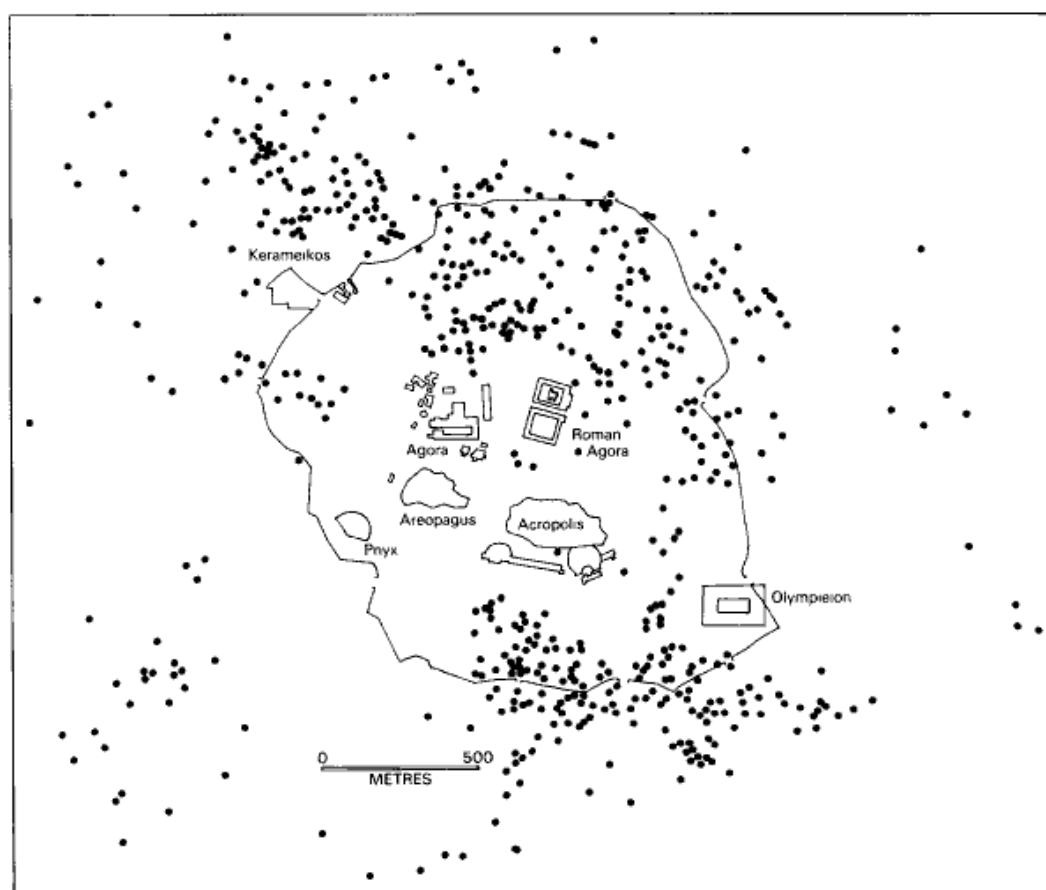


Fig.31. Excavations of the Greek Archaeological Service at Athens, 1960–1978. The plan shows only those digs reported in *Arkhaiologikon Deltion* 16 to 33:2 (published 1963 to 1985); the major monuments marked on the plan have also been extensively excavated. The circuit wall shown is that of the early fifth century BC

later ones, this element of distortion is probably not too important here. The only unusually deep graves are the shaft graves of the late eighth and sixth centuries, which coincide with times when the size of the burying group was increasing.

A second type of relative visibility may have more impact. If graves of one period are easier to identify because of surface indications or are more desirable because of their grave goods, they may tend to be over-represented in the archaeological record. This may be the case at some times in Attica. The sixth-century mounds at Anavyssos, Vari, Velanideza and Vourva have been known for generations, and have an inherently better chance of entering the archaeological record than, say, fifth-century burials, which only rarely had mounds.

The easiest form of visibility to quantify is the number of objects in graves. The contents of Athenian graves are presented in figure 32: here all published graves are used rather than just the intact burials, since it is the discovery of graves as they exist in the present, rather than as they were originally deposited, which is of interest.

While visibility is a factor, it cannot fully account for the under-representation of Archaic graves, or the presumed under-representation of the Protogeometric to Middle

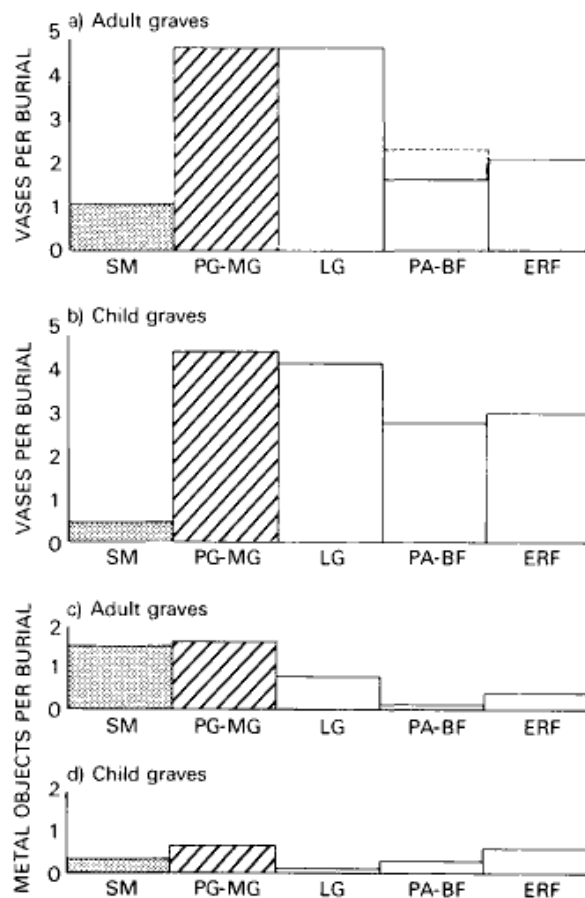


Fig.32. The relative visibility of burials: numbers of finds per grave. (a) Adult graves, vases; (b) Child graves, vases; (c) Adult graves, metalwork; (d) Child graves, metalwork

Geometric graves. Early Red Figure graves contained on average 2.2 vases, as against 1.7 in the Protoattic to Black Figure graves. If the vases placed in Opferrinnen outside the burial cutting are included in the Protoattic to Black Figure score, then the average rises to 2.4 vases per grave. In neither case does the small difference seem sufficient to explain the change in representation around 500 BC. This would appear to support the idea that the change reflects the purposive behaviour of the ancient populations, rather than problems in retrieval.

The decline around 700 BC is more significant, from 4.9 to 1.7 vases per burial. Further, the tendency for Protoattic vases in particular to be smashed on a pyre while Late Geometric vases were generally placed whole and unburned in the grave adds to the likelihood that Late Geometric graves will be discovered more easily than Archaic. However, even if we were to multiply the number of Protoattic to Black Figure graves found outside the systematic excavations in the Kerameikos and Agora by a factor of three, to compensate for the problems of visibility, the total would still be less than 200 adult graves (1.1 per annum), just half the Late Geometric rate (125 adult graves, or 2.1 per annum).

The Protoattic to Black Figure cemeteries were definitely smaller and probably fewer than those of Late Geometric and Early Red Figure. While it is likely that considerable numbers of Archaic graves have failed to be identified in rescue excavations, this is certainly not the whole explanation for the decline in numbers after 700. Many areas of Late Geometric and Early Red Figure burial were not used in the seventh and early sixth centuries, and show up as 'negatives' on excavation plans. It seems unlikely that all the cemeteries where seventh-century burials have not been published went out of use, but the combination of wide distribution of the rescue digs and the frequency of negatives certainly suggests that the areas in use in Archaic times were small.

It is impossible to quantify the scale of the problem. All we can do is to be cautious. Archaic graves were less visible than those of Late Geometric, and slightly less visible than those of Early Red Figure, but this alone seems insufficient to explain the fall in the numbers of cemeteries known, and certainly cannot explain the fall in the numbers of graves within cemeteries.

The situation is more straightforward in Protogeometric to Middle Geometric, when adult graves are as visible as those of any other period. If there were as many graves and cemeteries of these periods as in Submycenaean or Late Geometric, then more should have been discovered. The point is made still more forcibly by the child graves: these are more visible than the child burials of any other period, yet are also rarer.

There seems to be no case for retrieval as the source of the fluctuations in the numbers of graves known. If the arguments of this chapter are accepted, then the changing numbers must be seen as the results of changes in the purposive behaviour of the ancient Athenians. As a prelude to attempting to test the exclusion theory, I will close this chapter with a discussion of how exclusion might have worked in practice.

Alternative disposal forms

All the discussion of archaeologically invisible disposal of both adults and children inevitably leads us to ask how this was carried out. Some might even find the idea of informal disposal impossible to accept, and an insurmountable objection to the

whole argument. At this point I will stress again that the distinction being drawn is not between burial and non-burial, but between *formal* disposal, in the subterranean facilities discovered in archaeological excavations, and *informal* disposal, still constituting a rite of passage for all the actors, but in a manner very different from that of the observed burials, and leaving little or no identifiable material residue.

That the far more extreme action of refusal of burial was applied to anyone other than deviants is highly unlikely, given the attitudes revealed from Homer to Sophocles (see Bremmer 1983, 89–94; Parker 1983, 43–8; Garland 1985, 101–3). However, this is not at all the same thing as informal disposal of groups within the population. Most archaeologists take it for granted that a large proportion of the dead of many ancient societies will have received ‘invisible’ disposal. It would be easy to provide a long list of ethnographic parallels (see Ucko 1969), and the serious effects of archaeologically invisible disposal are now widely recognised. Even ancient history can provide some cases. In Late Republican Rome, most of the commoners were disposed of informally in large pits called *puticoli*, outside the city (Varro, *On the Latin Language* 5.25; Horace, *Satires* 1.8; Festus, s.v. *puticoli*). Others were exposed to carrion birds, thrown down wells, or dumped on rubbish tips (Nock 1972 [1932], 278). Babies less than forty days old could be placed in niches in house walls. The *puticoli* could contain tens of thousands of corpses. Not surprisingly a few have been discovered, although traces of the skeletons themselves hardly ever survived (Lanciani 1888, 64–5). Still other corpses were casually cremated, without formal burial (Hopkins 1983, 210).

Of course, the Roman material is not directly relevant here, and the Greek literary evidence is much poorer. Xenophon (*Hellenica* 1.7.20) seems to refer to the corpses of deviants being thrown into pits; Valerius Maximus (*Facta* 2.67) tells an undated and not very helpful anecdote about the disposal of the dead in a large pit outside the Greek city Massilia; and Apollonius Rhodius (*Argonautica* 3.200–9) relates a curious tale about the Colchians, who (he says) in the third century BC exposed men in trees, but inhumed women.

There is much to be learned from the experience of British archaeologists dealing with the scarcity of human remains in the pre-Roman Iron Age (c.650 BC–AD 50). As was mentioned in Chapter 5, there is a striking dearth of skeletal material from south central England. A number of simple inhumations are known, particularly for the period after 400 BC. These often come from storage pits, although parts of human skeletons also occur in enclosure ditches and in other deposits within settlements (Whimster 1981, 5–25; Walker 1984; Wait 1985, 83–121). Ellison and Drewett suggested that the four-post-hole structures found around the outskirts of some Iron Age sites may have been platforms for the exposure of the dead (1971, 190–2), and the human bones scattered around settlements such as All Cannings Cross, Danebury and Gussage All Saints perhaps support the idea of exposure, generally taking place away from the settlement itself in Wait’s view (1985, 238).

The British evidence makes it clear that it is possible to find traces of informal disposal of the dead if excavation is sufficiently extensive and careful. In the present state of excavation in Attica, we simply do not have the knowledge to hope realistically for positive documentation of such practices.

On the whole, we might feel that exposure of the dead was rather alien to Iron Age

Greek traditions, and is not the most likely practice; although it was certainly not unknown. Thucydides (2.34.3) describes the mixing of the bones of fallen warriors in a single coffin for each tribe at Athens, perhaps implying an earlier stage of exposure and decomposition of the flesh; and some archaeologists have interpreted post-holes found around the Dipylon Gate as funerary stands for the exposure of the war dead (see Clairmont 1983, 35–6). Of course, the treatment of Classical Athenian war dead may have been unusual in this, as it was in many other features. However, Musgrave noted that one burial in Ambelokipi tomb E at Knossos had probably been exposed before burial (in Sackett 1976).

If informal disposal was practised, casual surface cremation or charnel pits/houses are perhaps the most likely forms. The poverty of the Attic evidence prevents decisive documentation, but a few possible traces have survived. An apparent sixth-century BC surface pyre on Mt Parnes in fact turned out to be purely sacrificial and non-funerary (Hood 1960, 8; 1961, 5). It could be hypothesised that the mysterious 'chthonic sanctuary' at Anavyssos, built c.700 BC, was a charnel house/ossuary, but since the structure was completely cleared out in the fourth century BC, this could only be a guess (see Themelis 1973/4, 109–10).

Surface pyres were found around the edge of the walled enclosure of the North Cemetery at Vari, although there is no direct evidence for their use in informal disposal. If the Vari cremation graves were like the Athenian, however, with the burning of the corpse in the grave itself, this interpretation must be a possibility. Eighteen pyres were found in the Phaleron child cemetery, although only numbers 5 and 7 were definitely said to contain human bones.

Excavations outside Attica have sometimes uncovered more positive traces. Probably the best evidence comes from the beginning of the Dark Age, in the twelfth/eleventh-century settlements at Tiryns and Lefkandi. At Tiryns, the Unterburg excavations have recovered more than fifty inhumations, covering a full age and sex range (Kilian 1979, 386–8; 1982, 396; 1983, 289). The bodies were placed in shallow scrapes among the houses, and only one had any artefacts. Kilian has interpreted these as members of a social group debarred from the use of chamber tombs (1979, 388).

In the small area of the Xeropolis settlement at Lefkandi excavated in 1964–6, twelve corpses of adults and children were found under the floors of Late Helladic IIIC phase 2 houses (Popham and Sackett 1968, 14). Again, there were no grave goods. Unlike Tiryns, no contemporary formal cemetery has been found at Lefkandi, although there is some evidence for Late Helladic IIIC graves in the Khaliotis field.

These two sites have been carefully excavated and studied. It need hardly be repeated that evidence of this kind is unlikely to have been discovered and published from Attica, because of the dearth of stratigraphical digs in Iron Age settlement sites.

In Geometric times, a dozen or more skeletons have been found inhumed in shallow pits at Nafplion, without grave goods, while other burials were made in pithoi, with offerings (Charitonides 1953, 193–4; 1954, 238). The only comparable Attic multiple burial is the grave of eighteen men in irons at Phaleron. However, these are probably post-Achaic deviants (Pelekides 1916, 25; Young 1942, 24, n.8). If charnel pits were used in Attica, it would not be surprising that they have not been detected. The Roman

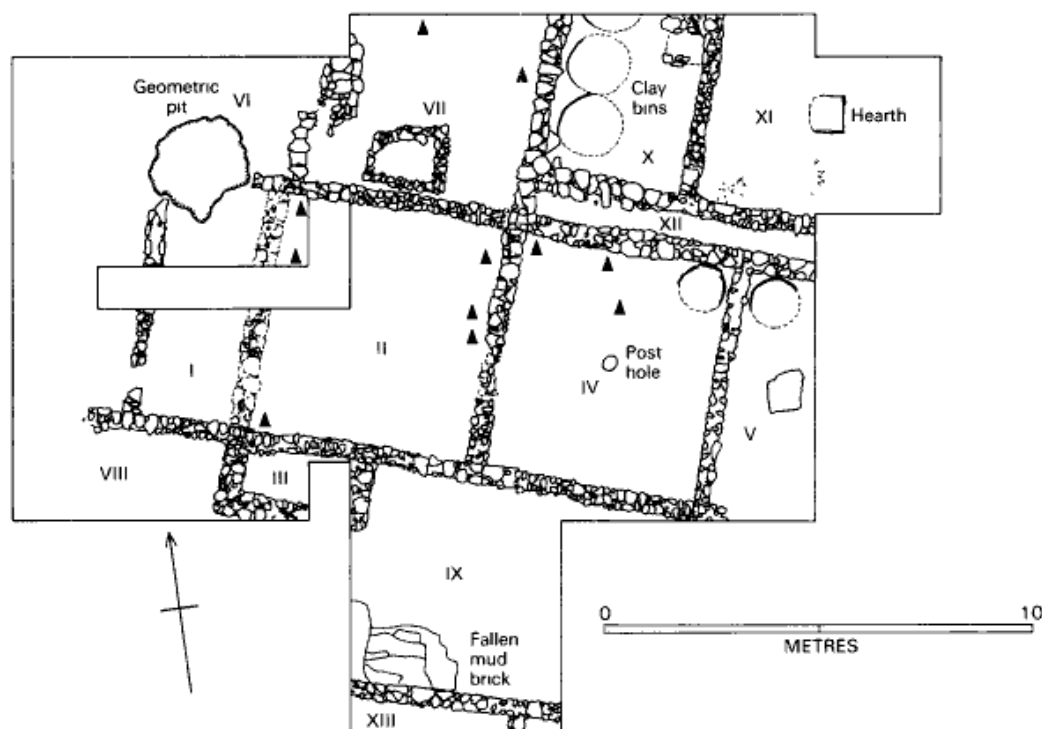


Fig.33. Intra-mural burials at Xeropolis, in Late Helladic IIIC phase 2. Burials marked by triangles (after Popham and Sackett 1968, figs.12 and 21)

puticoli were far larger and more numerous than anything the Athenians would have needed. The population of Late Republican Rome was probably nearly one million (Hopkins 1978, 96–8); Rome would thus have been producing about 40,000 corpses per annum – more than the total living population at Athens at any time in antiquity. Even in the mid-sixth century, Athens probably produced no more than 750 dead each year. It is perhaps relevant to note that the century of excavation on and around the *Dēmosion Sēma* at Athens has failed to produce much evidence of the Classical multiple tombs for the war dead (Clairmont 1983, 29–45). The difficulties increase still further if the pits for the bodies of the lowly were left open, as in eighteenth-century Hamburg (Whaley 1981, 104) or raked over and reused every few years, as was the case in France even after the imperial decree of 1804 (Ariès 1981, 516–17).

Informal surface cremation without subsequent burial is perhaps indicated at Donoussa, where two Middle Geometric pyres have been excavated in the tiny hamlet (Zapheirópoulou 1969, 370–2). As Coldstream notes (1977, 91), if these do represent human cremations, the deposits must be the remains of a considerable number of people.

The surface pyres at Lefkandi in the eleventh to ninth centuries, which contained much human bone, could equally well represent the final resting place of part of the population. Many of the graves contained little or nothing of the remains of the deceased, and we cannot automatically assume that all the dead were symbolically honoured with a tomb after their cremation. Further, as Hector Catling points out

(1985b), in some of the pyres jewellery had been left in places as it would be worn on the corpse, suggesting that the pyre may have been the end of the funerary process. Informal, archaeologically invisible disposal of part of the Dark Age population might at least resolve the controversy over the extent of the cemeteries required by what must have been a very substantial community (in Hägg (ed.) 1983, 211).

One of the best examples of mass graves comes from Aegina. Here, in addition to small, quite rich shaft graves, and the spectacular Phokosgrab tumulus, a 'Massengrab' was excavated, which the excavator interpreted as a slave tomb (Welter 1938a, 517; 1938b, 56). A similar distinction between formal disposal of some of the dead and more summary treatment of a less privileged group might also be reflected at Ano Dranista in Thessaly, where in addition to thirty-one cremations inside a tholos ('beehive') tomb, disorderly piles of human bones were found dumped in the dromos, outside its entrance (Arvanitopoulos 1911, 353). A huge confused mass of human bones was found in Marmariani tomb VI, also in Thessaly (Heurtley and Skeat 1930/1, 10), although it may be that the opening in the roof of the tomb and the arrangement of the bones indicate robbing rather than a charnel vault.

There is abundant evidence for informal mass burial on Crete, although it should be noted that the Iron Age practice perhaps belongs to a local tradition going back to the Early Bronze Age (Renfrew 1972, 429–34). The 'bone enclosures' at Vrokastro are an interesting example. Thirteen eighth-century structures were found on Karakovilia and Kopranes hills, outside the settlement (Hall 1914, 155–69). These contained traces of a considerable number of cremations, with the ashes and bones scattered on the surface. Hall suggested that another bone enclosure, of seventh-century date, had been found at Chondrovoulakes (1914, 154, n.1; see Boyd 1901, 154). The bone enclosures were certainly surface cremations of a type which would be unlikely to survive in Attica, but they do seem to represent at least some prestigious burials – a gilt fibula and weapons came from no.1, and a thin gold bead from no.8. The finds were generally quite rich, and since the bone enclosures were later than the chamber tombs at this site, they might represent a chronological development rather than an alternative disposal form.

Vrokastro also provided a number of skeletons simply left under an overhanging ledge on Karakovilia, dated as Geometric by the sherds with them (Hall 1914, 174). These, at least, seem to be positive evidence for the casual disposal of some of the dead. A similar practice was discovered in the 1983 excavations at Skales cave near Praisos, which was used for disposal of the dead in Protogeometric and Geometric times (Papadakis and Rutkowski 1985).

Finally, mention should be made of Petros Themelis' *Frühgriechische Grabbauten* (1976). Themelis argued that the Geometric settlement sites excavated in the Cyclades (with which he bracketed Thorikos and Brauron) were in fact mausolea. He has since conceded Zagora to be a town for the living (pers. comm. 1983), but still holds to the other sites as necropoleis. His interpretation focuses on the use of relief pithoi, which he treats as urns for the dead, although there is at present no evidence of bones or ashes. That the relief pithoi were used in domestic contexts is now certain, from finds at Zagora, Koukounaries and Grotta. Themelis has failed to win much support for his daring hypothesis, and the more systematic excavations in the late 1970s and 1980s have

demonstrated conclusively that sites like Ag. Andreas, Zagora and others were towns for the living, not the dead. However, the argument is not disproven, particularly for Xombourgo.

There is certainly little incontrovertible evidence for archaeologically invisible burial, particularly from Attica; but then it is never easy to find positive evidence for a negative argument. Given more extensive excavation, particularly on the fringes of settlements and cemeteries, we might in time produce remains of charnel pits or houses. At Athens itself, the same patterns of excavation which make it unlikely that the sample of large, formal cemeteries is seriously skewed also make it unlikely that traces of the more ephemeral activities of informal disposal of the dead will emerge. However, continued excavation at sites like Anavyssos, Marathon, Merenda and Vari may produce information.

Conclusion

I have argued that there are positive grounds for thinking that exclusion from formal burial was practised in Attica from c.1050 to 750 and 700 BC to the late sixth century, and that access to the formal cemeteries was limited on the basis of rank.

In Chapter 3, I suggested that: (1) in Iron Age Greece, differences in mortuary treatment were an integral part of the differences of the social personae of the deceased; and (2) it is likely that such expressions will have included archaeologically visible dimensions. This being so, we would expect to find that in Protogeometric to Middle Geometric and Protoattic to Black Figure, when (I suggest) the range of adults receiving formal burial was restricted by rank, the range of social personae manifested in funerary practices would be similarly limited. That is, the degree and nature of mortuary variability should be much more restricted in Protogeometric to Middle Geometric and Protoattic to Black Figure than in Submycenaean, Late Geometric and Early Red Figure. If mortuary variability and the range of social personae visible in the graves are not narrower in the periods when the burying group is smaller, then we can reject the theory of exclusion from formal burial.

Mortuary variability

In this chapter, I attempt to measure the expression of social personae in the Attic cemeteries, through the medium of mortuary variability. The model suggested in earlier chapters leads us to expect a narrower range of personae in the burials of Protogeometric to Middle Geometric and Protoattic to Black Figure than in Submycenaean, Late Geometric and Early Red Figure.

Role theory

Pader points out that the value of role theory varies according to the questions being asked (1982, 56). Here it is of paramount importance. Following Goodenough (1965; 1968; 1970), we can say that any social interaction between individuals or groups depends on each actor taking on a social persona, comprised of those social identities (e.g. adult, female, mother, wife, etc.) which seem to be required by the occasion and the setting. The personae selected sum up the mutual rights and duties demanded and owed by the two parties to the interaction.

When in Chapter 3 it was seen that the Greeks consistently associated differences in funerary rites with the *status* of the deceased, it was precisely the recognition of this social persona that I spoke of. A *status relationship* was established between the deceased and the survivors, in which the survivors adopted and the deceased was given a particular social persona, and the form of mortuary activity required was the symbolic recognition of the specific problems raised by the extinction of the deceased's persona. These problems, and their ceremonial solutions, varied with the social personae selected and with the form of the social structure.

If the deceased's persona is then the aggregate of his or her rights and duties vis-à-vis the survivors, it is obvious that *rank*, in the sense of the deceased's particular level of superordination or subordination in the ideal social structure, will always be one of the crucial determinants in the status relationship that is initiated. Thus we will expect to find that when only a limited number of rank groups take part in the funerary interaction as the buried party, only a small range of personae will be evoked in a society's funerals, and differentiation of the dead will be limited. There will still be differentiation, since every social persona is unique, but the possible number of personae available to the actors will be restricted. Where individuals of a wider range of rank positions take part in funerals as the deceased, the range of possible social personae adopted by both sides in the interaction, and therefore differentiation in funerary practices, will be much greater.

What we wish to establish here is the *range* of personae within the particular symbolic

system. Anthropologists sometimes comment that 'structure' is one of the most abused words in the English language, but at the risk of introducing still further confusion, I want to employ the word in yet another sense in this chapter. Tainter, in his analyses of burial, uses structure to mean 'the number, nature and arrangement of [the system's] articulated components and subsystems' (1975, 1): that is, the number of subgroups within the domain, without concern for whether we can necessarily identify them as hierarchically ranked or not. Such an approach to society, and the 'sociometric' stance generally found in Tainter's work, are open to many criticisms, but for the limited aims of this chapter the concept is appropriate. It must be shown that there is more structure (in Tainter's sense) in the cemeteries of Submycenaean, Late Geometric and Early Red Figure than in those of Protogeometric to Middle Geometric and Protoattic to Black Figure.

The measurement of structure

A quantitative approach to structure is necessary. In recent years, archaeologists have employed some very sophisticated statistical techniques in the analysis of burials, but there are acute problems with the Attic data: in particular, the varying states of preservation and standards of publication of the graves have produced a very fragmentary record, which renders many techniques inappropriate.

This obstacle could be circumvented by reducing the number of attributes to a level where the majority of the graves could be directly compared, but this would mean the loss of almost all evidence for variety, and the more meaningful patterns would disappear completely. Another solution, using only the intact and well published graves, as Hodson did for Hallstatt (1977, 401), would reduce the sample to a uselessly small body. If the study is to have a point at all, it must include as much of the evidence as possible, in a framework of analysis which takes account of the fragmentary state of our information.

The best approach will be through the classificatory technique of componential analysis. This method was first developed in linguistics, and was quickly adopted by cultural anthropologists for the study of kinship terminology (e.g. Hammel (ed.) 1965; Goodenough 1965). It has an obvious appeal for archaeologists, and was soon in use for the classification of burials (Brown 1971; Saxe 1970; Tainter 1975; 1977; 1978). This procedure allows us to partition the evidence into types, splitting it up in a *key diagram* on the basis of the observed dimensions of the cemeteries. Each type will be the result of a unique combination of the attributes then in use, which is represented in shorthand by a *componential definition*. According to the principles of role theory, each different definition represents a distinct social persona in the mortuary population (Saxe 1970, 14-63).

Although componential analysis continued to be used in linguistics, its use in anthropology and archaeology declined in the 1970s. The main reason for this seems to be that the approach is a normative one, relating to an 'ideal language' where something either is or is not a member of a category: it does not take account of the fuzziness of classification found in everyday social action (Keesing 1972).

For many classes of artefacts, componential analysis will not be an appropriate tool

(see D. Miller 1985). But it was stressed in Chapter 2 that here we *are* studying a 'mental template'; the roles created in and by funerary ritual are not polythetic entities, but are strictly bounded. We should distinguish between formal structure, corresponding to the actors' descriptive knowledge, and less formal social organisation, corresponding to knowledge employed in daily social encounters (Holy and Stuchlik 1981, 16–21). It was argued in Chapter 3 that the funerary ceremonials involved heavily redundant symbolism, for which a polythetic classification should in theory be possible (see Braun 1981), but in practice the sets of burials never display perfectly redundant attribute combinations, and only a monothetic classification can be expected to produce intelligible results (Tainter 1975, 13; 1981, 417). The componential analysis of burial customs will classify the data according to the formal structure through which they were created. This structure is the object of the inquiry, and componential analysis is the best method to comprehend it.

Sokal and Sneath's suggestion of a tripartite present/absent/no comparison system unfortunately works only where the number of cases for which there is no comparison is small (1963, 162–5). More recently, Sneath suggested that in polythetic classificatory systems, serious errors would occur only if more than 50% of the values were missing. However, the approach to ideal social structures suggested here demands a monothetic taxonomy, which is far more sensitive to gaps (Sneath 1982). A specifically archaeological study of the problem of fragmentary data suggested extensive modifications of the CLUSTAN program, but in the end offered little hope of transcending the difficulties of gaps in the evidence in computer-based analyses (Galloway 1976; see also Richards and Ryan 1985, 25).

Although key diagrams create a monothetic classification, they are extremely flexible, and allow the inclusion of burials for which some values are missing. Saxe (1970, 59–63) suggested that the differences within the funerary domain can best be established through Venn diagrams, plotting the overlap of personae; however, when dealing with large amounts of fragmentary archaeological data, this approach is both cumbersome and ineffective, and fails to provide a precise quantitative base.

The main problem with the variability of the burials is that the data are nominal. As such, the only summary measure of central tendency which can be used is the mode, for which no measure of dispersion is applicable. That is, it is not possible to establish from the key diagrams a 'mean disposal type' for each period and to measure variation from it. Analysis must begin with the mode.

It was pointed out above that every social persona is unique, and that if two or more graves share a componential definition it is likely to be the result of the information loss inherent in any classificatory system. Therefore the componential definition which occurs most often may not be the best measure of modality. Instead, I shall calculate an 'ideal' modal componential definition for each period, built up from the individual attributes which occur most frequently in each dimension of differentiation. Figure 34 shows the key diagram for Kerameikos Zeitstufe 2b. Here, five componential definitions (a1 b1 c1 d4; a1 b1 c1 d5; a1 b2 c1 d4; a1 b2 c1 d5; a1 b3 c1 d4) occur twice, but a1 b1 c1 d4 is the modal value, in that each element occurs more frequently than any other value within that column.

Having established an ideal modal type, it is then possible to establish how far the burial population varies from this. Since the data are nominal, all divergences from the modal definition must be given equal weight. For instance, returning to Zeitstufe 2b, where the mode is a1b1c1d4, in each dimension a, b, c and d we classify the variables as 'a1' and 'not a1', 'b1' and 'not b1', and so on. Therefore gr.SM 104 (a1b1c1d3) and gr.SM 108 (a1b1c1d1) will be treated as equidistant from the mode. The system is simple and easy to work, and provides an accurate measurement of variability, although it does

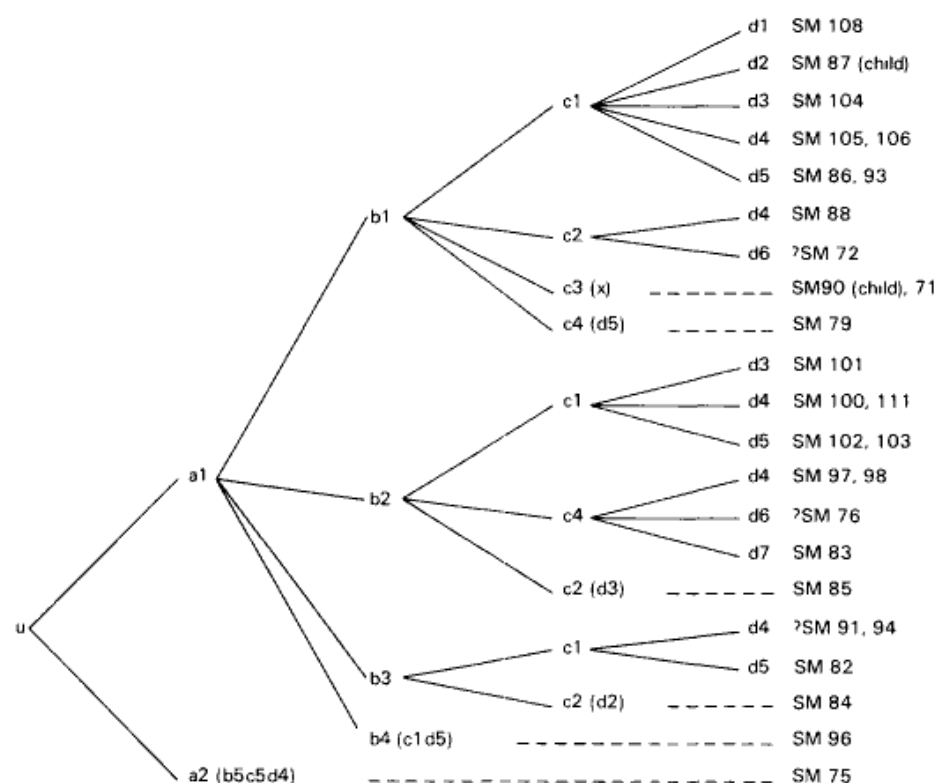


Fig.34. Key diagram for the Kerameikos Pompeion cemetery in Zeitstufe 2b (see also fig.37). Key diagrams are laid out according to a set of formal conventions (Saxe 1970, 50-9). Beginning at the left hand side with *u*, the 'universe' or complete set of burials being classified, each column (*a-d*) represents a non-trivial dimension of funerary ritual in which the burials differ; the variables used must encompass all significant distinctions which occur among the graves. Here the variables identified are the method of disposal of the corpse (*a*), form of facility (*b*), orientation (*c*), and grave goods (*d*). Non-varying attributes are not included in the key diagram. It makes no difference to the partitioning of the personae what order these dimensions are placed in, but it is conventional to place those with fewest variables to the left, so that the other components 'nestle' into them. Similarly, dimensions for which values are missing are placed on the right, so that they have the least effect on the appearance of the key as a whole. It is not possible (or necessary) to present the key diagrams and variability curves for each period of each cemetery here; the sources can be found in the site lists at the back of the book, and an exhaustive breakdown in I. Morris 1985, ch. 4, figs. 5-88.

The alternative practices used within each dimension of differentiation in Zeitstufe 2b were: a1 = inhumation; a2 = cremation. b1 = cist grave; b2 = shaft grave; b3 = 'Steinschüttung'; b4 = pit grave (see Styrenius 1967 for definitions); b5 = vase. c1 = North-East/South-West; c2 = North/South; c3 = East/West; c4 = North-West/South-East; c5 = no orientation. d1 = vases, bronze, pearl, glass grave goods; d2 = vases, iron; d3 = bronze; d4 = vases; d5 = no grave goods; d6 = vases, bronze; d7 = iron.

not pick out the exceptional graves (for instance, gr.SM 108 mentioned above was particularly rich in bronzes). Since we wish to delineate the overall structure rather than to identify special cases, this does not seem to be a serious drawback. In the diagram in figure 34, it is possible for burials to differ from the modal value a1 b1 c1 d4 in any of four dimensions. The actual break-down is shown in table 7a.

Since the number of dimensions in the key diagrams is a function of the burial customs and will vary through time, the dispersion around the mode must be converted to a standard measure to allow comparison. Figure 35 shows the variability of Zeitstufe 2b plotted as a cumulative frequency chart (the method of calculation is summarised in table 7b). On the horizontal axis is *V*, variability, measured from 0 (i.e. the modal definition itself) to 1 (the maximum variability possible within the classification: in Zeitstufe 2b, a *V*-score of 1 would be given to a grave differing from the mode in all four dimensions a, b, c, d). On the vertical axis is *N*, the number of graves; 1 represents the whole membership of the group of graves which can be accommodated within the key diagram.

In this way, the nominal data are effectively converted to interval data, and the variability of each period can be identified, as the area above the curve. The larger the area, the greater the variability within the cemetery.

In theory we can simply read off the variability of the cemeteries, providing a test of the exclusion argument. In practice, however, there are some problems, particularly when the number of graves is very small, or the cemetery has been very badly disturbed. For instance, if only two graves are known, the area *V* above the curve would necessarily be either 0 or 0.5 – i.e. either the minimum or the maximum score possible – with the value decided by what may in fact have been relatively unimportant variables. Certain curves (e.g. that for Zeitstufe 10 in the Kerameikos, which has only three adult graves) should perhaps be ignored for this reason. Missing classes of data may also produce an abnormally large modal group. Hence the quantification of variability is not to be taken as a wholly 'reliable' test. Like any quantitative tool, its usefulness can only be assessed by more traditional methods. One result of these problems is to heighten our depen-

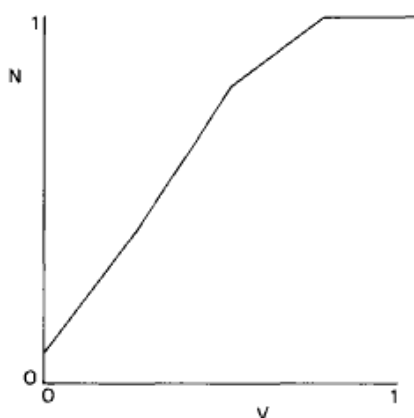


Fig.35. Variability curve for Kerameikos Zeitstufe 2b (see table 7)

Table 7. *The measurement of variability: Kerameikos Zeitstufe 2b*

(a) Dimensions of differentiation					
	Number of dimensions different from the modal definition				
	0	1	2	3	4
Number of graves	2	9	10	5	0
(b) Calculation of variability					
	Score on <i>V</i> -axis ¹				
	0	.25	.50	.75	1
Score on <i>N</i> axis ²	.08	.42	.81	1.0	1.0

Notes

1. Since there are four dimensions of differentiation, each dimension in which a grave differs from the mode (al bl cl d4) scores .25 on a 0–1 scale.
2. Since there are twenty-six classifiable adult graves, each burial scores 0.038 on a 0–1 scale.

dence on the few relatively well-known cemeteries, although the important but less fully published cemeteries such as Salamis, Anavyssos and Merenda can be used in a more impressionistic manner to supplement the quantitative approach to variability. It is therefore of the utmost importance to consider the cemeteries in some detail in the text, rather than simply to rely on the variability scores derived primarily from the Kerameikos.

Only this cemetery can provide a full sequence of *V*-scores, which is shown in figure 36. These clearly conform to the expectations of the exclusion hypothesis; variability was more restricted in Protogeometric to Middle Geometric and Protoattic to Black Figure than in Submycenaean, Late Geometric and Early Red Figure, although *V* scores fluctuated within these periods, for reasons to be discussed below. The only other cemetery to span two of these major phases, the Thorikos D 52 area, also shows a marked decline in Protoattic; however, erosion had destroyed all the above-ground remains there, which will have influenced the low *V* score.

The analytical framework

It is very important that the classificatory systems behind the key diagrams are consistent. In componential analysis, attributes can be described as varying or unvarying. Unvarying attributes are of no analytical value; for example, if all the graves under consideration are cremations, then cremation/inhumation will not be used as a dimension, since it would serve no purpose in partitioning the domain.

The main problem is the selection of varying attributes. Some have urged that *every* aspect of the archaeological record must be used in the analysis, but this is neither practical nor necessary. As Clarke pointed out

The attributes of most artefacts are almost infinite and to suggest that the objective archaeologist must analyse them all is unrealistic and in practice the

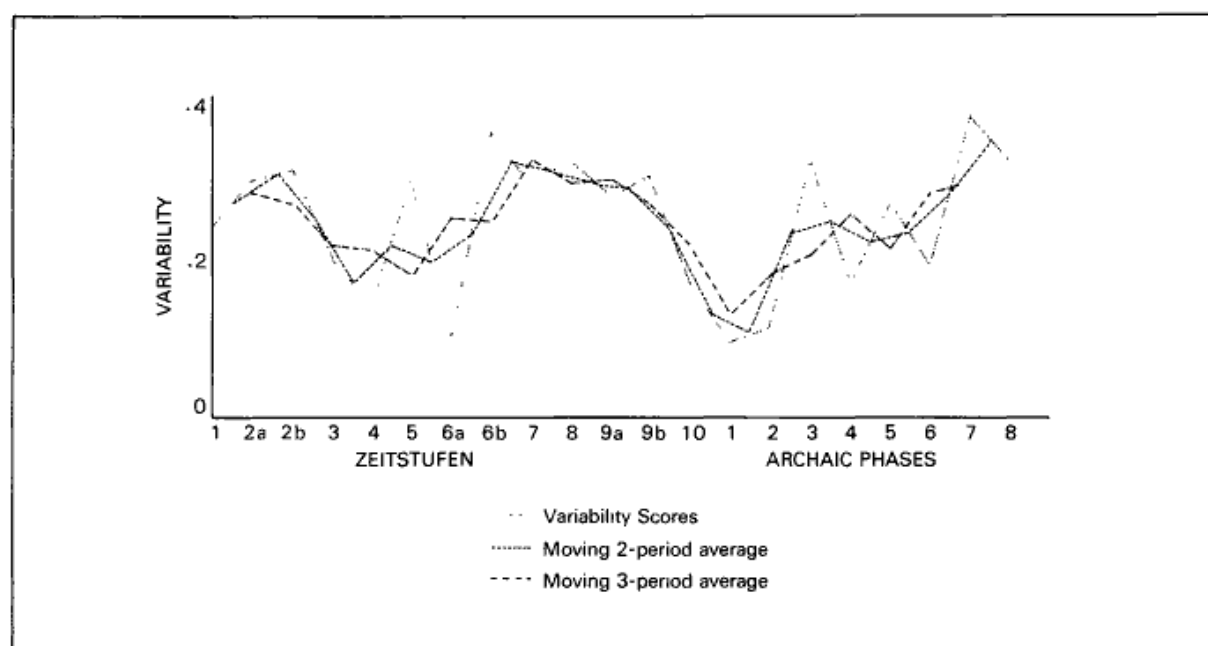


Fig.36. Kerameikos variability scores, showing raw data and moving averages. Note the lower scores in Zeitstufen 3–7 and Archaic phases 1–6

attempt is never made . . . judgement is . . . arbitrary and dependent on the observer and his views or model of the mind of ancient man.

(Clarke 1978, 14; see also Richards and Ryan 1985, 18–19)

Blanket coverage is no substitute for the exercise of sound judgement. O'Shea has pointed out that three types of primary depositional pathways contribute to the formation of the archaeological record of burials – the intentional, coincidental and accidental (1984, 24–5). When dealing with varying attributes for componential analysis, it is vital that we concentrate on *intentional* behaviour to the exclusion of other deposits.

It is probably not significant that one grave is 5 cm longer than another, and partitioning the evidence on this basis would be faulty. However, the great size of burials like Kerameikos grs.hS 290 and CSG 1 does seem important. As a result, a certain amount of subjective judgement is necessary. For example, when dealing with Protogeometric amphora cremations I include as a varying attribute whether or not the urn was protected by a stone cover slab, but not the type of stone used, since in all cases readily available stones were selected, and I have assumed that the choice was not significant.

The attributes chosen are based on those given most emphasis in the Greek sources reviewed in Chapter 3. These include above all the method of disposal of the corpse, the form, orientation and location of the facility, and the form and quantity of grave furniture and markers.

Relatively little attention is focused on microspatial analysis of the graves here. Few burials are at the same time intact, in the case of inhumations have a preserved skeleton, and are sufficiently well published to make such a study possible. The addition of this

level of analysis, important though it can be, would only fragment the evidence still further, without bringing any corresponding benefits. Similarly, grave goods have not been considered from the point of view of decoration and supposed function, again mainly because of the disturbance of graves and the varying standards of publication. A recent attempt to establish correlations between vase decoration and other features of the grave assemblages in the Kerameikos Ag. Triada Geometric cemetery produced no statistically significant results (Whitley, n.d.). Such analyses cannot be pursued with the data presently available. It is worth pointing out, though, that a more detailed study of grave goods would make the decline in variability around 700 and its increase in the sixth century still sharper, since grave goods were used far less in Protoattic to Black Figure; and a focus on arrangement of the body would increase variability in Submycenaean, Late Geometric and Early Red Figure but far less so in Protogeometric to Middle Geometric and Protoattic to Black Figure, as cremation was the norm in these periods. While these provisos do not compensate for the restrictions imposed on the level of analysis, they do suggest that the picture of variability given here will not be misleading.

The problem of post-depositional change is a major one. Saxe notes that disturbance and destruction of parts or the whole of mortuary variability may render componential analysis inappropriate (1970, 13), and this is sometimes the case with these burials. However, the main strength of the approach used here is its flexibility, and it is often possible to attach burials loosely to a fairly narrow range of possible types.

The primary aim of the analysis in this chapter is to demonstrate changes through time. The study of temporal variation is, after all, the greatest strength of archaeology; but diachronic approaches pose particular problems for the analysis of burials. Burial customs change through time, often rapidly, and ancient Greece was no exception in this. The changes themselves, and particularly the rate of change, can be of great interest, but various difficulties arise. We must not confuse diachronic change with synchronic differentiation. To do so would be disastrous. Fortunately, the relative chronology is very fine grained at Athens.

The graves are considered in fairly narrow chronological bands, and separately by the cemeteries and the plots within them. Even so, it is sometimes necessary to attribute observed variation to diachronic changes in symbolism rather than to conscious status differentiation. Certain chronological phases – particularly Early Protogeometric and Middle Geometric II – were transitional between two very different disposal forms, and it is therefore no surprise to find a variety of types of cremation in use side by side. We cannot expect changes in burial customs to coincide conveniently and exactly with changes in vase painting styles. In general, though, it is fairly easy to identify variation due to diachronic change and variation due to synchronic differentiation.

Table 8 shows the variability scores, where quantification has been possible. In the following sections, the main difficulties of classification will be discussed in some detail. The selection of attributes and their significance will be considered, and the data from less well known cemeteries will be brought in to provide a second strand of evidence, qualitative rather than quantitative, but contributing to the overall picture.

Table 8. *Variability scores, Attic adult cemeteries*

Cemetery	Variability
<i>Kerameikos</i>	
Zeitstufe 1	.2425
Zeitstufe 2a	.2975
Zeitstufe 2b	.3075
Zeitstufe 3	.2000
Zeitstufe 4	.1425
Zeitstufe 5	.2950
Zeitstufe 6a	.1000
Zeitstufe 6b	.3558
Zeitstufe 7	.2916
Zeitstufe 8	.3240
Zeitstufe 9a	.2231
Zeitstufe 9b	.3090
Zeitstufe 10	.1667
North bank, Zeitstufe 9a	.3304
North bank, Zeitstufe 9b	.2917
Phase 1	.0950
Phase 2	.1250
Phase 3	.3225
Phase 4	.1720
Phase 5	.2740
Phase 6	.1915
Phase 7	.3755
Phase 8	.3220
South Mound, phase 8	.1667
<i>Agora</i>	
Submycenaean	.3087
Late Geometric I	.2813
Late Geometric II	.1094
Archaic cemetery	.4612
<i>Erechtheiou St</i>	
Submycenaean	.3104
<i>Peiraios St (Dipylon)</i>	
Late Geometric I	.2238
Late Geometric II	.1000
<i>Thorikos D 52</i>	
Late Geometric II	.2765
Seventh century	.0700
<i>Trachones</i>	
Late Geometric	.1138
<i>Anavyssos</i>	
Late Geometric I	.0763
Late Geometric II	.0890
<i>Vourva</i>	
Sixth century	.2700
<i>Vari</i>	
1962 excavation	.2960
1964 excavation	.1238

Analysis of the burials

Submycenaean

I will begin with the Kerameikos. In Zeitstufe 1, variability was quite limited ($V = .2425$), and G. Krause (1975, 18–19) even suggested the deliberate concealment of status distinctions in the graves. 85% of the graves are differentiated only on the basis of grave goods, and even then the variety is minimal. Grs. SM 10 and 19 had four vases each, and no grave had more. Four graves have metal; SM 27 is unusual in having fourteen bronze objects, and SM 20 and 36 have iron, which may still have been a rare metal. Generally, the graves in the north and east of the cemetery are the richest in metal, which may show a tendency to increase grave goods towards the end of Zeitstufe 1.

In Zeitstufe 2a, there is much more structure ($V = .2975$). The most obvious development is the breakdown of regular alignment of the graves. Three groups of graves on the Zeitstufe 1 NE/SW orientation can be seen (SM 29–31, 48, 49; SM 61–5; SM 42 and 43 with the Zeitstufe 1 graves), but the other plots use alignment to show differences within groups (see Kraiker 1939, 7). None of the burials in the NE/SW groups had any metal grave goods, apparently combining the Zeitstufe 1 alignment with an ‘old-fashioned’ paucity of metal (although we should note that four of the five graves in each group were disturbed). There was otherwise more variety in grave goods than in Zeitstufe 1. Seven of the sixteen intact graves had metal: SM 70 had six vases and fourteen bronzes, while

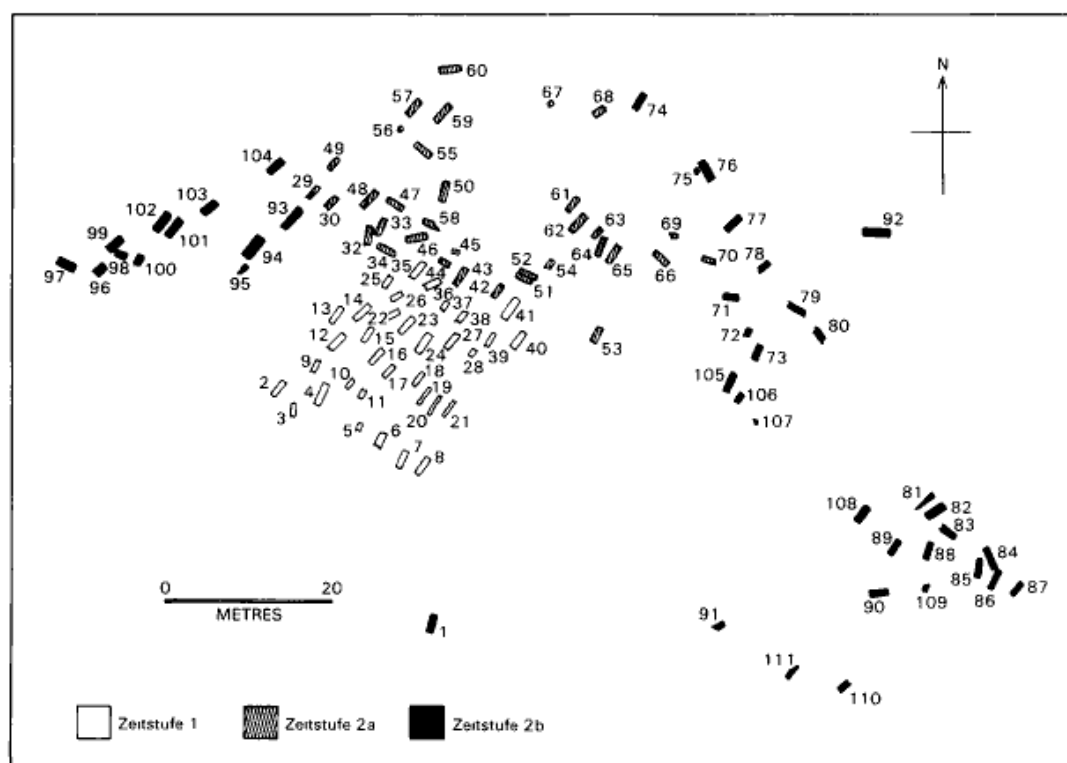


Fig. 37. The Kerameikos Pompeion Submycenaean cemetery, Zeitstufen 1–2b. All graves have the prefix SM

SM 46 had gold and SM 47 ivory. As in Zeitstufe 1, cist graves make up the bulk of the burials (80%), but the groups of outliers are now larger.

The Zeitstufe 2b cemetery is similarly complex ($V = .3075$). Cists now comprise only 52% of the total, and shaft graves 32%. This variety is not simply part of a general change in burial customs, since urn cremation, the Protogeometric norm, appears only once (SM 75). Similarly, the canonical Zeitstufe 1 NE/SW orientation accounts for only 67% of the cists and 54% of the shaft graves. Kraiker (1939, 6) suggested that SM 105 and 106 belonged to a row of NE/SW graves beginning in Zeitstufe 2a with SM 61–5; but even in the NE/SW plot to the west of grs. SM 93 and 104, there was much variety in grave forms and furniture. Six of the twenty-one intact graves and a further four of the twenty disturbed burials had metal. Gr. SM 108, with thirty-five or more bronzes, was indeed the richest grave in the Submycenaean cemetery.

Outside the Kerameikos, the differences between the early and late parts of Submycenaean cannot be paralleled, possibly because chronological control is not so precise. Variability was high in the Agora (.3087) and on Erechtheiou St (.3014), although in the Agora several separate cemeteries are conflated. The Kriezi and Drakou St plots reflect a similar diversity: 6 cists, 4 cremations and 2 pits on Kriezi, with weapons in grs. 1967/70 and 79, and a mixture of pits and cists on Drakou. A very few graves even had gold ornaments (Drakou St grs. 6 and 8; Erechtheiou St gr. 1968/7; and an electrum necklace from an Olympieion grave), and several were rich in bronzes.

In the adult cemeteries, there was a great deal of variety, and at the Kerameikos at least, this variety was confined mainly to the later part of Submycenaean. On the other hand, all across Athens the child graves were very uniform. Prior to the contraction in the size of the cemeteries and grave plots c. 1050 BC, a wide range of adult social personae was recognised in Athenian burials.

Protogeometric

Again, the Kerameikos is the best starting place. Zeitstufe 3 was something of a transitional period, with a slight overlap between Submycenaean style inhumations and the new urn cremations. Grs. PG 21–3, along with PG N 1, N 113 and N 114, all in Zeitstufe 3, are the last adult inhumations in the Kerameikos until gr. hS 109, around 825 BC. Elsewhere in Athens, the only Protogeometric adult inhumations are Agora T15:1 (Early Protogeometric) and Amphiktyonos gr. I, which cannot be dated within Protogeometric. It is therefore best to exclude these graves from the analysis; they are part of a chronological development, not symbols used to differentiate a particular social persona in contrast to the cremations. Indeed, Styrenius (1967, 65–7) classifies PG 21–3 as Late Submycenaean 'B'.

As a result, variability is quite low ($V = .2000$). 89% of the graves are urn cremations. Within these, PG 2, 11 and 14 differ in having no stone cover, but all were disturbed. Otherwise, only grave goods show differences, and even here the range is narrow. PG 5 is the richest, with two gold spirals and an iron pin with a bronze globe on the shank; and of the intact graves, only PG 12 had no metal. The conclusion that all the urn cremations represent similar social personae must be a reasonable one. Only PG 1 in the Ag. Triada group was a primary cremation, and there is even a possibility that this could be a

destroyed urn cremation. The structure of this cemetery contrasts very sharply with Submycenaean.

In Zeitstufe 4, the V score is .1425. PG 15, 25, 30 and 31 are the last graves of the Early Protogeometric style trench-and-hole cremations, where the urn hole was in the centre of the trench. This was canonical in Zeitstufe 3, and never occurs after Zeitstufe 4. The contrast between this and the developed Protogeometric form with the urn hole at one end is therefore treated as a purely chronological process.

All the Ag. Triada graves were intact below the ground, and all contained iron, although bronze was rare. PG 25 is the richest, with a gold spiral, an iron pin with a bronze globe, two vases and a loomweight. In view of the good preservation of the grave associations, this lack of variety is significant. The only other Zeitstufe 4 graves are the badly disturbed hS 92 α and hS 117 α . Both were urn cremations, but no other details survived.

The increase in variability in Zeitstufe 5 ($V = .2950$) is probably due to the great length of the phase (perhaps more than 75 years). Eight of the graves differ from the other twenty in not having a lid to the urn, but all were badly damaged, and this is probably not significant. 93% of the graves were trench-and-hole cremations, and the main

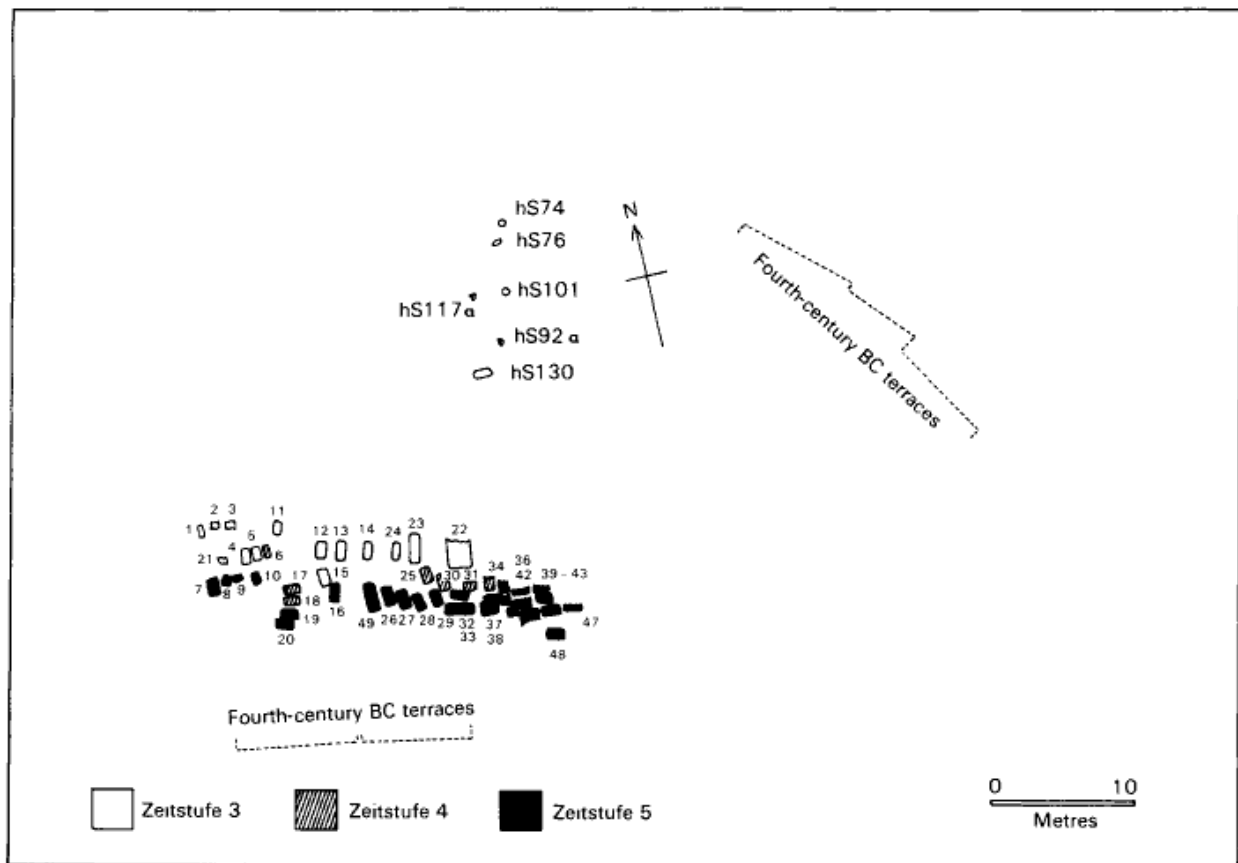


Fig.38. The Kerameikos Ag. Triada Protogeometric cemetery, Zeitstufen 3-5. Graves not marked hS have the prefix PG

distinction was in the sealing of the urns. Some had a vase as a lid, some a vase and a stone slab, and some a bronze bowl. This last group includes only late graves, and the bronze bowl is perhaps a purely chronological distinction. There is greater variety in the grave goods than previously, although only three of the eleven intact urn cremations (PG 7, 10, 19) were without any metal. All three were male, and generally female graves were rather richer than male. While PG 39 and 48, both late in the phase, had a very large number of vases, there was less variety in metal than at any earlier time.

After a sudden change c.1050 BC, the variability of the Kerameikos cemeteries declined. There was little change over the next 150 years and the greater complexity of Zeitstufe 5 is probably a result of its length. There would not have been a wider range of personae represented in the cemetery at any one time in this phase than in Zeitstufen 3 and 4, and throughout Protogeometric the structure of the cemetery was vastly simpler than in Zeitstufe 2.

Outside the Kerameikos, the evidence is poor. The Vas. Sophias Avenue cemetery will be of the utmost importance, but at present we can only say that all or nearly all the graves were urn cremations. In the Agora, nearly all the graves are Late Protogeometric, and nearly all are disturbed. The few intact urn cremations all contained metal goods, but there were also a few primary cremations. There were differences within the Erechtheiou St graves, but these span the whole of Protogeometric, and some of the variety may stem from disturbances. We can however make the minimal statement that almost all the graves are adults, and all intact examples include similar grave goods. Outside Athens, urn cremations are known from Nea Ionia, Anavyssos, Eleusis, Marathon and Merenda, and inhumations have been reported from Anavyssos, Menidi and Marathon, but there are few useful details.

Early and Middle Geometric

Variability reaches its lowest ebb in the Kerameikos in Zeitstufe 6a ($V = .1000$). Only five adult graves survive, but the lack of structure is profound. Orientation separated plots, and all intact urns were sealed with a bronze bowl. Grs. G 7 and 41 were rather richer than the others, but all the intact cases had a few vases and metal goods.

The only other criterion which has been suggested for partitioning the graves is their markers and grave stones. Coldstream (1977, 35) argues that the kraters above G 1 and 2 show they were specially venerated. I am not persuaded; Kübler (1964, 173–4) points out that probably all the graves in this area originally had elaborate marker vases. Disturbance of the area was random, but until the fifth century BC most of the graves were intact. By then, though, the ground level had risen so much that the ninth-century graves and their markers were buried. The kraters that survived *in situ* over G 1 and 2 are simply an accident of post-depositional processes, and have no implications for the structure of the cemetery.

The beginnings of the move to inhumation confuse the situation in Zeitstufe 6b, and variability rockets to .3558. The cemetery is also badly disturbed, and only G 11, 12 and 20 had intact deposits. However, five of the nine urn cremations had metal goods, and seven had marker vases (and in four cases grave stones too) preserved more or less in place. The main development in grave forms was the use of shelves along the sides of the

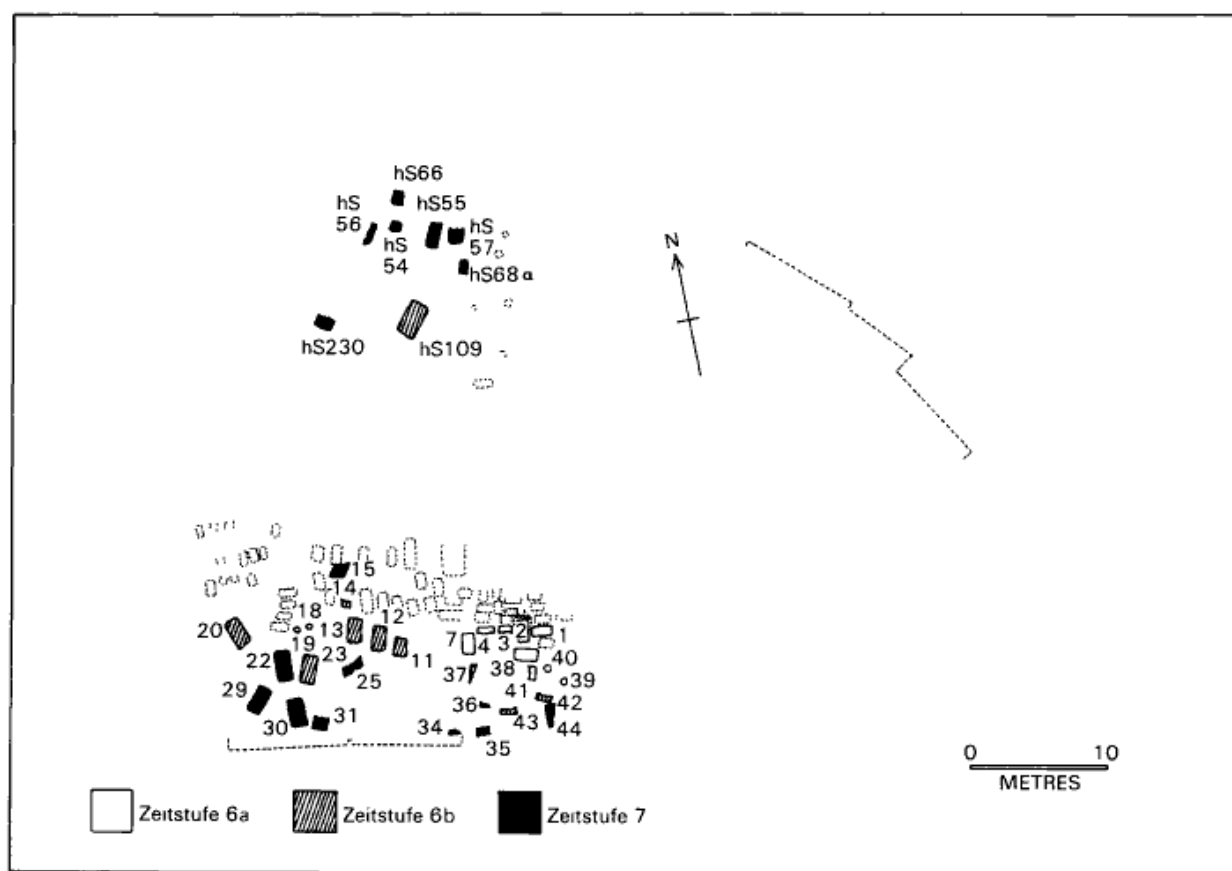


Fig.39. The Kerameikos Ag. Triada Early and Middle Geometric cemetery, Zeitstufen 6a-7. Graves not marked hS have the prefix G

trench cutting, which Kübler (1954, 8) probably rightly sees as the start of the transition to inhumation in shaft graves. Otherwise, urn sealing is again the main variable: either a vase or a bronze bowl.

The first inhumations since 1050 BC are grs. G 20 and hS 109. While G 20 was probably a child, hS 109 was certainly an adult, but a most unusual one. This burial reverses both the usual form of disposal and the usual sex attributes: inhumation rather than cremation, and a belly-handled amphora as a marker rather than a krater. It was a warrior burial, and was obviously positively evaluated, including a gold diadem. The analysis of outliers is a major difficulty (see Shay 1985), but whatever the facts of this particular case, it should not be allowed to distract attention from the still very simple structure of the cemetery.

The Zeitstufe 7 graves are a mixed bag of urn cremations and inhumations; by the end of this phase, inhumation had won out. Although the *V* score of .2916 is exaggerated by this process, there does seem to be some increase in structure. All the graves are very badly damaged, but the differences within the cemetery result from positive factors rather than from the effects of disturbance. The Sacred Way and Eridanos north bank areas were also in heavy use, but are almost destroyed.

The uniformity of the graves around the rest of Athens is remarkable. The largest

group is on Kavalotti St. Other than gr.B, part of the final coming of inhumation, all the Early and Middle Geometric graves were urn cremations. There was clearly some variety in grave goods, and some graves were sealed with vases and others with bronze bowls; but even so, there was apparently little structure, and the formal similarities with the Kerameikos graves are striking.

Even when several cemeteries are treated together, the Athenian graves are very consistent. In Early Geometric, Kriezī St gr.1967/7 had no hole for the urn – a feature common in the eighth century – and the Ag. Markou St grave was a double burial. Otherwise, there was virtually no variety (the Stoa of Eumenes grave is probably Late Helladic IIIC, not Early Geometric (Mountjoy 1984)). In Middle Geometric I, Kriezī gr.1968/2 may have had no lid or covers, but this is not clear. Of all the ninth-century adult burials, only Nymphaeum gr.4 and four graves in the unusual Areopagus plot had no metal goods.

The Middle Geometric I Areopagus plot was rather more differentiated than the other cemeteries. Grs.II8:2 and II8:3 are very similar, although on a slightly different alignment; and AR III/IV may join them, or go with AR V. This plot is unusually large and differentiated, has a relatively balanced age structure, is based on primary rather than urn cremation, and is rather poorer than the other ninth-century cemeteries. I have repeatedly stressed the difficulties of attaching meaning to particular symbols, but this grave group needs some comment. The use of these distinctive practices strongly suggests that this plot was special in some way. The generally poor grave goods might suggest that it was a low-status group, but on the other hand it seems to me that the inclusion of the young and its position on the very slopes of the Areopagus – surely as much a focus of Athenian life in the Dark Age as later – might be more important: my guess would be that this may have been a particularly high-status group, perhaps even a royal family of mid-ninth-century Athens. However, this can only be speculation, and has no direct bearing on the main argument.

Moving on to Middle Geometric II, the fragmentary data allow us to place urn cremation Kynosarges gr.2 with Parthenonos St gr.3, and to make Theophilopoulou St gr.4 and Parthenonos gr.5 belong either with these or with Kriezī St gr.1968/12, but the evidence is poor. There are also a number of adult inhumations, but in general these are not very well published.

In conclusion, while the evidence is faulty, there seems to be little structure in the Early and Middle Geometric cemeteries in Athens, although the Areopagus plot may be exceptional. There is also little structure at Anavyssos or Marathon, although far greater variety can be seen in the Eleusis South Cemetery in Middle Geometric II. The celebrated Isis grave was a cist inhumation, and gr.α a pit inhumation. Both date to c.800 BC, contemporary with several urn cremations.

Some variety can be seen when looking at Attica as a whole, such as placing the urn in a cist at Marathon and Anavyssos and the separation of the urn and pyre deposits in the Eleusis West Cemetery, but there is otherwise great homogeneity across the whole region. Unfortunately too little evidence is available to discuss in any detail the range of social personae in any one cemetery, and arguments from the limited variation observed are effectively arguments from silence. However, the contrast between Proto-geometric

to Middle Geometric and the Late Geometric pattern in rural Attica is certainly sharp enough.

Late Geometric

Major changes are apparent in the Kerameikos in Zeitstufe 8 ($V = .3240$), and the Dark Age pattern of a single major structural unit with just a few outliers disappears. Variability is high, even if G 32 is excluded from the Ag. Triada cemetery as a late example of the Middle Geometric type of urn cremation. On the Eridanos north bank few graves have survived, but the variety is striking. G 89 might, like G 32, be excluded as a Middle Geometric hang-over, but G 71 is the first example of a cremation in a bronze urn, which is very much a Late Geometric phenomenon.

In Zeitstufe 9a (Ag. Triada, $V = .2231$; north bank, $V = .3304$), the first 'oversize' graves appear. I have rather arbitrarily selected 3.5 metres as a cut off point, but this could easily be moved 25 cm either way without significantly changing the membership of the class. Gr.hS 290 in fact attains a mighty 4.3 metres.

The north bank cemetery is slightly better preserved in this period, and three plots can be seen. In one, primary cremation G 73 and bronze urn cremation G 72 were found

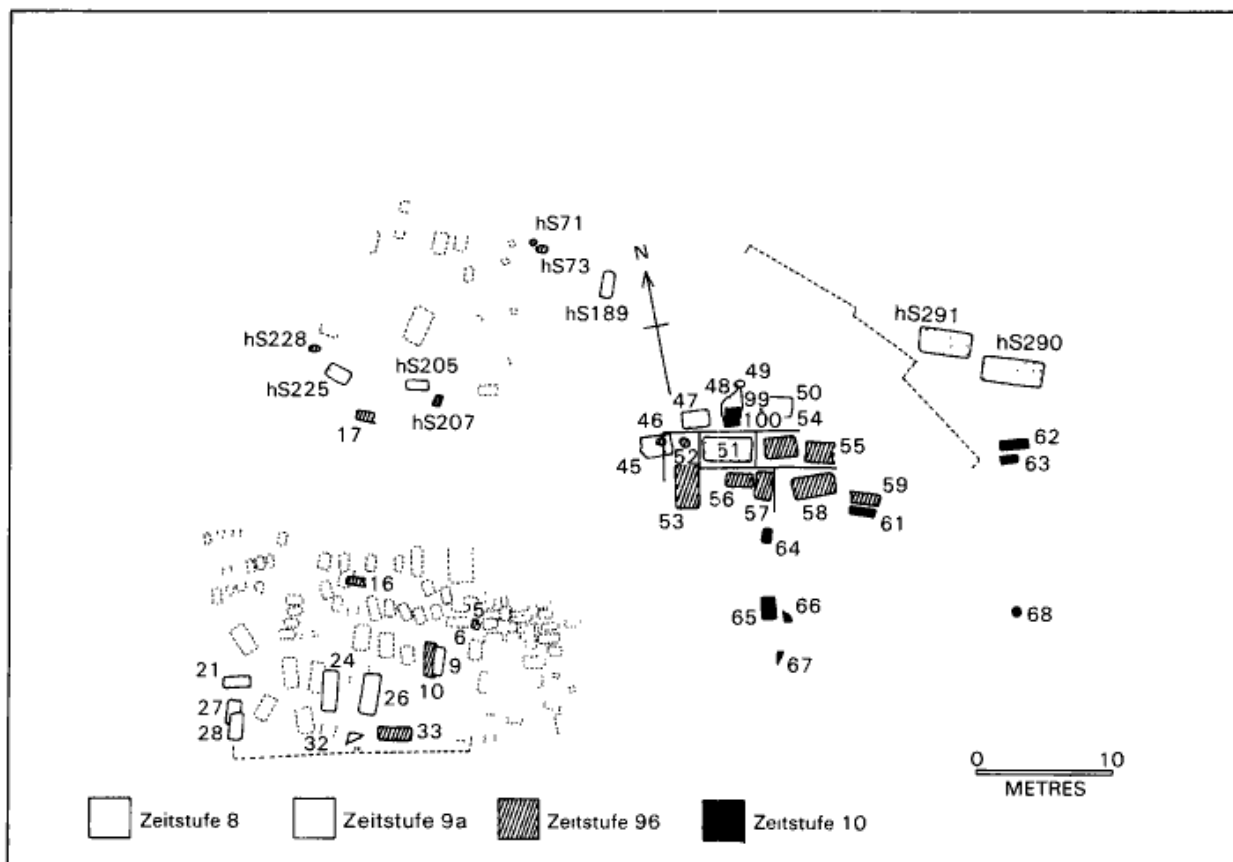
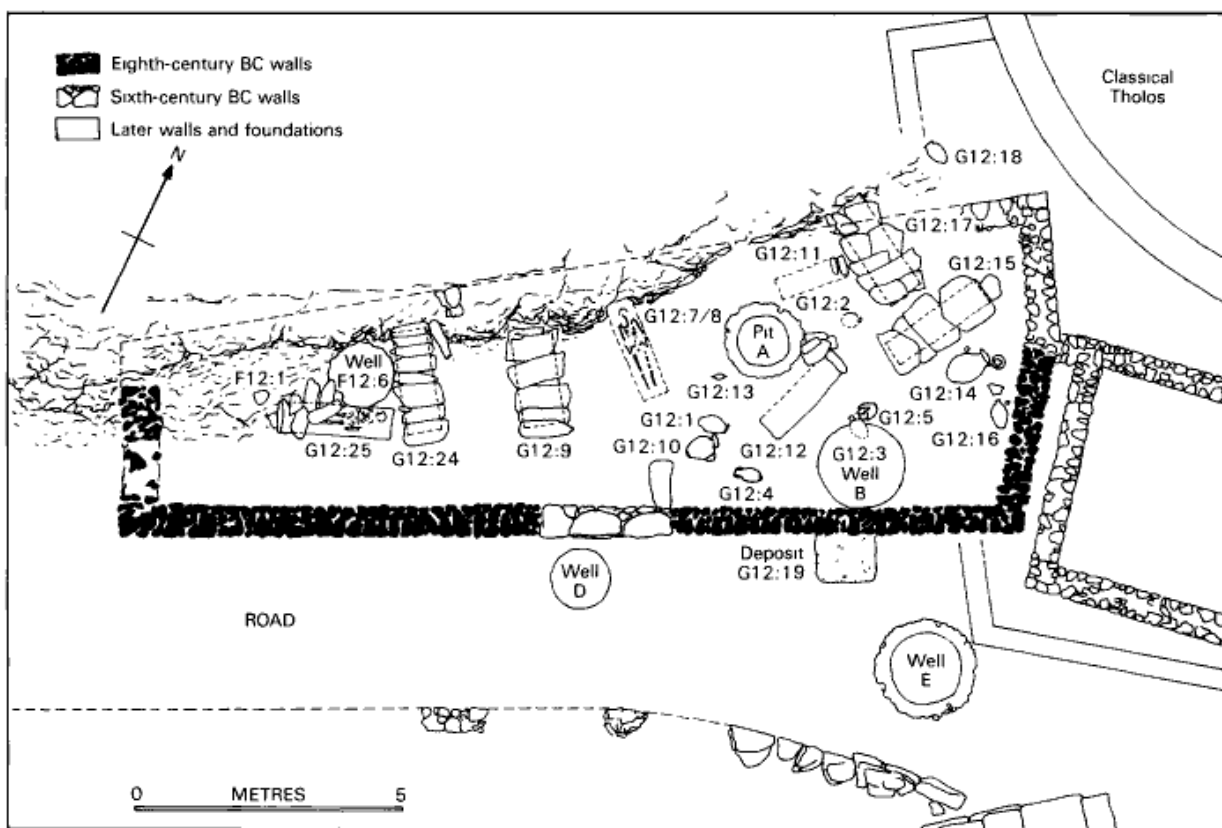


Fig.40. The Kerameikos Ag. Triada Late Geometric cemetery, Zeitstufen 8–10. Graves not marked hS have the prefix G

together, while in the main plot a variety of shaft and pit graves were in use together, on many different alignments. The third plot consisted of VDAk 2, a cist grave, and VDAk 1, a pit inhumation with thirty-four vases in it (see fig. 8).

In Zeitstufe 9b (Ag. Triada, $V = .3090$), child graves become common, and it is important to concentrate on the adult graves alone. In the Ag. Triada area, 21% of these were cremations, and 79% inhumations; variability in grave goods was pronounced. There are interesting developments on the Eridanos north bank ($V = .2917$), where shaft graves stop being used, and grave goods decline. Simple pit inhumations without metal offerings were becoming the norm, and there can be no doubt that this was part of a complex process culminating in the change in burial customs around 700 BC.

Only three adult graves survive from Zeitstufe 10 in the Ag. Triada area ($V = .1667$). This is very unfortunate, as Zeitstufe 10 is surely one of the most important stages in the development of the cemetery, linking the Late Geometric diversity and the Archaic homogeneity. The trends on the north bank might be indicators of a real decline in diversity in the closing years of the eighth century, but the Zeitstufe 10 V score cannot be used to support the argument.



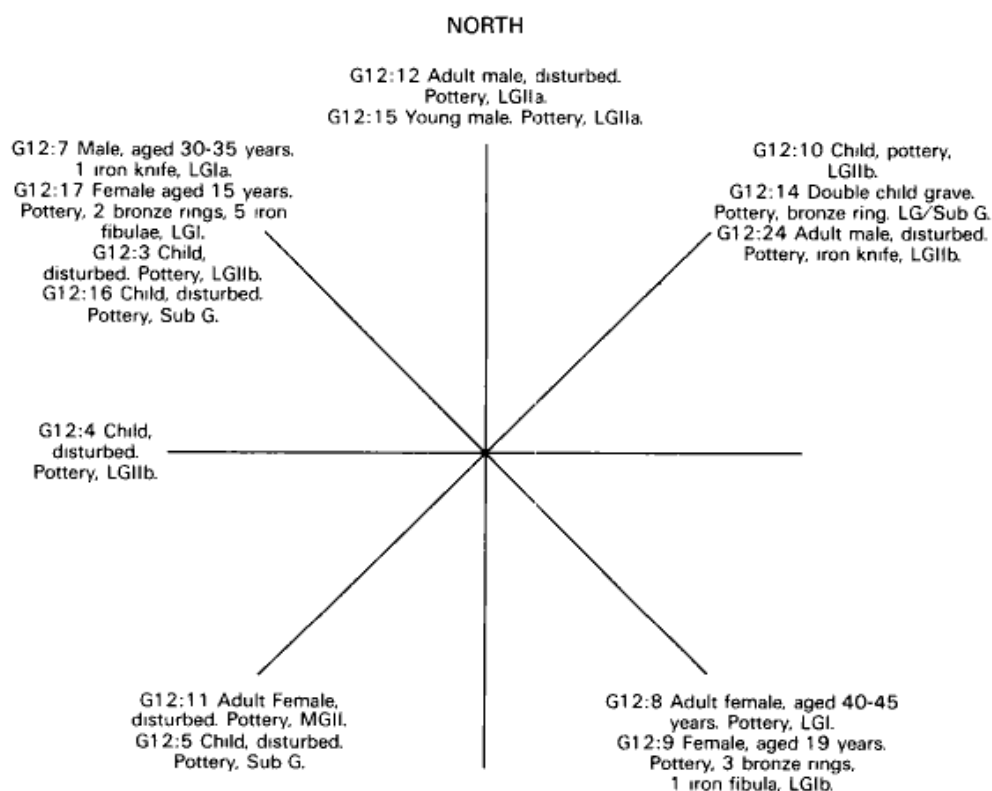
a

Fig.41. (a) The Agora Late Geometric Tholos cemetery (after Young 1939, fig.1) (b) Orientation of the burials in the cemetery

The evidence from the rest of Athens increases enormously around 750 BC. In the Agora Tholos and Dipylon cemeteries, high *V* scores in Late Geometric I fall suddenly in Late Geometric II (Agora, .2813 to .1094; Dipylon, .2238 to .1000). The Late Geometric II Dipylon cemetery is rather similar to the Eridanos north bank in Zeitstufen 9b and 10, although the lack of information on the Dipylon grave goods must contribute to the homogeneity.

In the Agora Tholos cemetery, most of the variety is in orientation, although one grave had a peribolos wall partly preserved around it, and gr.G12:7/8 was an unusual double burial. There is no obvious rationale behind the alignments (see fig. 41b). It is hardly likely that the variety results from the buriers' lack of interest, given the practices in the other Late Geometric cemeteries. Perhaps each family within the descent group used a different alignment. Whatever the explanation, though, the variety is peculiar to the plot, and sets it off from the other cemeteries in use at the time. The other Agora graves all come from smaller plots, although some may have suffered badly from the destruction of graves (e.g. Brann 1960, 403). Grave types were quite similar across the whole Agora, but there were often differences within plots in grave goods, etc. (e.g. plots B21, E18–19).

High variability is immediately apparent in many of the cemeteries known from rescue digs, although it is rarely possible to quantify it. Of the five Late Geometric graves on Kavalotti St, IB and K were very similar, but KA was a simple pit inhumation, and grs.1



b

and 2 were cists with slab covers (gr.2 also had a slab floor). There is little information on grave goods, although only gr.1 held an iron sword. On Erechtheiou St, gr.1964/A was a pit inhumation, 1968/4 was an urn cremation, 1964/B a pit with stone covers, 1955/Θ1 a cist, and 1955/Θ2, which had eighty-three vases, probably a primary cremation (Brouskari 1979, 10). Many cemeteries have both inhumations and cremations, and several are characterised by local peculiarities to an extent unparalleled in earlier times. The great variety of social personae in the Kerameikos is equalled everywhere, and it must be concluded that the structure of the Late Geometric cemeteries was far more complex than that of the Protogeometric to Middle Geometric graveyards.

Similar developments are seen outside Athens. At Merenda, the 1960 dig found Late Geometric primary cremations and urn cremations, while a pit grave cemetery was excavated just 200 metres away in 1967–8. The 1972 season found more primary cremations and inhumations. Even if we assume very different symbolism at each of the Merenda cemeteries, such that equivalent social personae were recognised by entirely different burial forms – which does not seem too likely – it is clear that a wide range of personae was being recognised by the Late Geometric buriers.

The Thorikos D 52 area is structurally closely comparable to the Athenian cemeteries ($V = .2765$), although some Attic cemeteries have surprisingly low V scores. At Trachones, if we follow Cavanagh (1977, 382–3) in assuming that the Type II burials are children, the V value is only .1138 in Late Geometric II; while at Anavyssos, the Late Geometric I score is .0763 and the Late Geometric II score .0893. The Anavyssos values are depressed because of the abnormally large modal class created by the lack of information on grave goods. These were probably highly variable, if the numbers of vases are anything to go by (fig. 4). In the 1973 excavation, only gr.I had a gold band (although grs.II and III were robbed), and metal was very unevenly distributed (P.G. Themelis, pers. comm. 1984). Once again we must await the full publication of this extremely important cemetery.

This account of the Geometric cemeteries suggests that there was indeed an increase in the range of social personae represented around 750 BC, and a consequent growth in the structure (*sensu* Tainter). The chronological span of Late Geometric is probably quite short, and a much more diverse structure of statuses emerges in these cemeteries than in the period c.1050–750 BC. Further, the relative homogeneity of Protogeometric to Middle Geometric burial practices across the whole of Attica (with the possible exception of Eleusis) is shattered in Late Geometric, when great regional variation appears.

This pattern of development certainly fits plausibly with the model suggested in Chapter 5, and satisfies the predictions arising from the theory of exclusion from formal burial. As will be seen below, the same is true of the radical reversal of Late Geometric behaviour which comes immediately after 700 BC.

Archaic

I begin, as usual, in the Kerameikos. To make the analysis clearer, I have divided the cemetery up into periods on the same basis as Krause's *Zeitstufen*. The phases are probably of uneven duration, but reflect the patterning of the cemetery more faithfully than

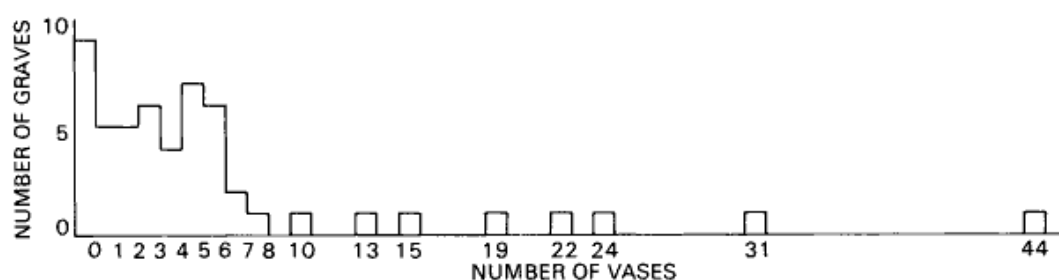


Fig.42. Distribution of vases in Late Geometric adult graves in Anavyssos (1966 and 1973 excavations). Mean number of vases per grave = 6.0; G (see Chapter 8) = .574

would be the case if the graves were treated by the conventional pottery subdivisions.

Phase 1 probably covers c.700–650 BC ($V = .0950$). The change in burial customs means that most of the variability was now above ground, and so prone to disturbance. The Ag. Triada area is the best preserved: all the adult graves had a small earth mound, and all are primary cremations. There is some diversity in the form of the air vents in the floor of the cutting, which is partly – but not wholly – a chronological development. Otherwise, variability is minimal. Only gr.A 4 had a deposit of pottery, but it is clear that these surface offerings were frequently disturbed. There were two vases in gr.A 8, and traces of mud plaster on mound A over gr.A 2. The contrast with the Late Geometric variability is striking.

The other small Kerameikos groups are similarly homogeneous, although at first there is some variety between plots. Bau Z grs.2 and 3 are like the Ag. Triada cremations, but have subsidiary infant inhumations in the Late Geometric II style; and the two cremations on the north side of the Sacred Way are like the Ag. Triada group, but instead of round mounds a rectangular earth marker was used (Bau A). This type of marker, called by Kübler an 'Erdmal', was used in the Ag. Triada later in the seventh century. Its use so early is surprising. The most interesting plot, though, is the Rundbau group on the north side of the Eridanos, where the Zeitstufe 10 burial forms continue until about 650 BC. Gr.A 62, a cremation in a bronze urn, is particularly striking.

Phase 2 is placed c.650–630/625 BC ($V = .1250$). The main change is the construction of much larger mounds, using soil brought in from other parts of the cemetery. In the Ag. Triada plot, A 9 was a shaft grave inhumation of a youth, while grs. A 11, 13 and 14 were cremations with mounds, and A 12 was a cremation under an Erdmal. The position of Erdmal a, on the edge of mound Θ, suggests it may symbolise a subsidiary status. The structure of the cemetery is again very restricted.

The Rundbau plot is very interesting at this time. Gr.Rb 5 was an extended inhumation in an oversize pit, and the Rundbau mound itself was built over it. This is the biggest seventh-century mound in the Kerameikos, and was used for at least one secondary burial.

Ursula Knigge (1980) dates the mound as Early Protoattic. A terminus post quem is provided by Late Geometric IIb/Early Protoattic sherds from the mound itself, and a terminus ante quem by gr.Rb 8, cut into it, containing Middle Protocorinthian II pottery

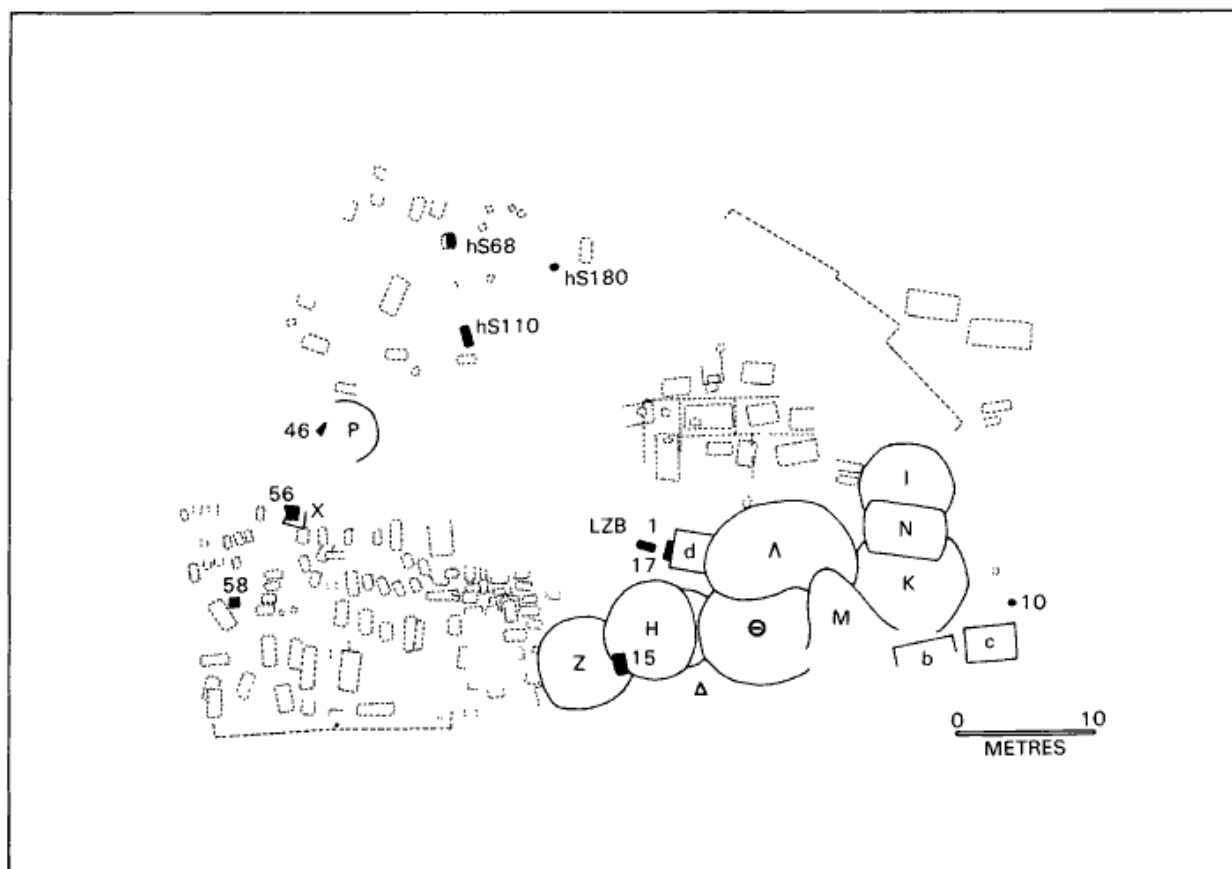
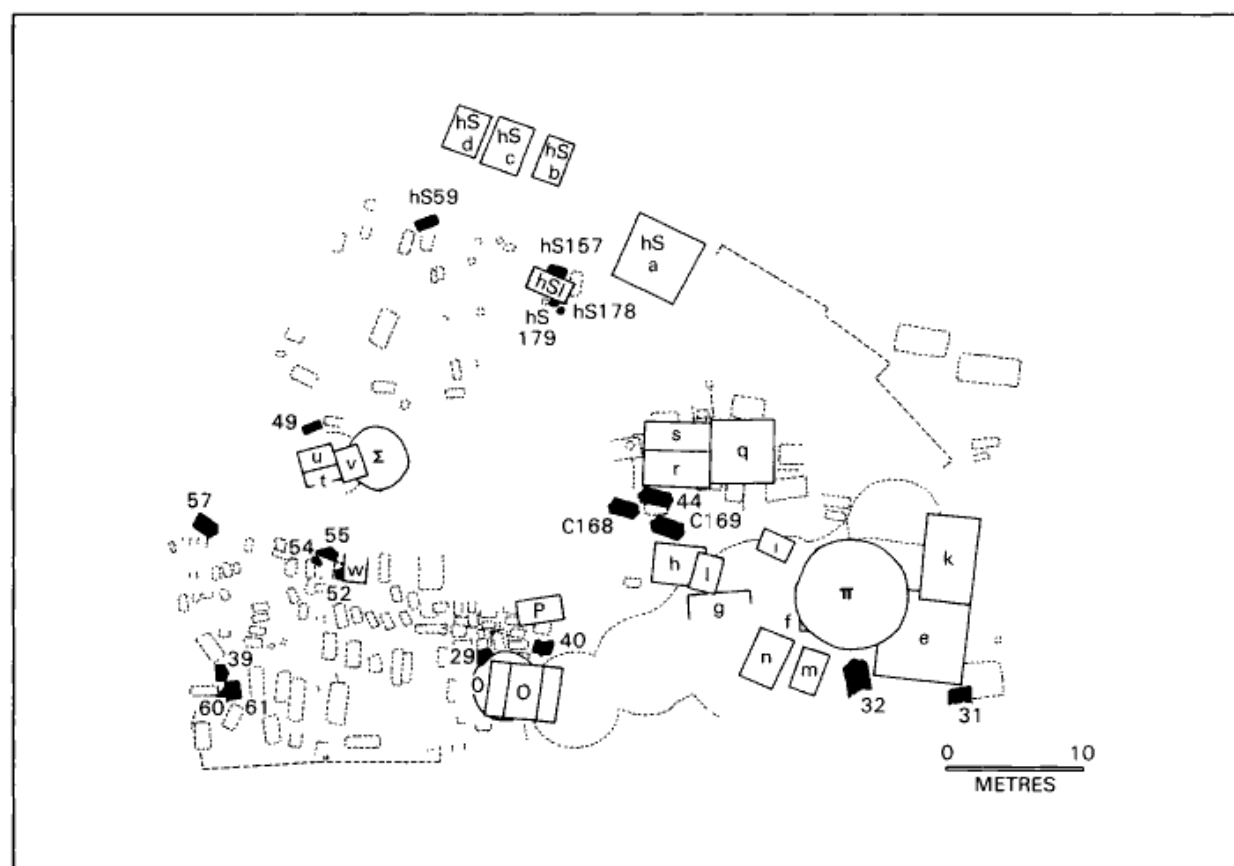


Fig.43. The Kerameikos Ag. Triada Archaic cemetery: (a) phases 1-3; (b) phases 4 and 5. Graves not marked hS, C or LZB have the prefix A

(?c.640 BC). Professor Knigge puts the construction near the terminus post quem because Rb 5 is placed parallel to Rb 6, which is a Late Geometric IIb grave. An alternative view is to assume that Rb 9, the burial of a pony cut into the mound, was part of the same lavish funeral in which the mound was built up, and, since Rb 8 is placed adjacent to the horse grave, that the whole ceremony (and Rb 5) took place near the terminus ante quem, around 650 BC. There is no strong evidence either way; a date in the mid-seventh century fits better with the general chronological development of the grave mounds than does Knigge's chronology, although an earlier date would allow Rb 5 to stand nearer the end of inhumation elsewhere in Attica.

Phase 3 probably covers c.630/625-610 BC, and the V score of .3225 is surprisingly high. The replacement of the mound by the mudbrick tomb as the standard grave marker during this period may have something to do with it. Mounds continued to be used, but seem to have been given new meaning. The high V score was a temporary peak only, and in phase 4 (?c.610-590 BC), V falls to .1720. No monumental mounds have survived, although there may have been one over gr.C 169, along with a statue. Small mounds of the early seventh-century type occur with grs.A 28 and 29, but otherwise the



b

main variation is in the size of the tomb (although tomb f with gr.A 24 was unusual in being made entirely of stone). The common argument that the tomb replaced the mound because of lack of space is not strong, there was plenty of room around tombs t, u, hS b, hS c and hS I, and tomb e was as big as most mounds. The changes are part of a gradual evolution in symbols during the Archaic period, rather than an adaptive response to overcrowding in this small cemetery.

Variability goes up again in phase 5 (c.590–570 BC; $V = .2740$). At this time, the double-cruciform air vent was going out of use, and the first shaft grave inhumations of the mid-sixth-century type appear (grs.A 33–35). Gr.A 61, an adult pithos inhumation, is quite unparalleled until fifth-century gr.C 419, and is to be seen as an exceptional burial without implications for the structure of the cemetery as a whole. That the structure was increasing throughout the sixth century is undeniable, but there is not a sudden jump after 600 BC. On the north bank of the Eridanos, later activity has left little evidence. Sixteen double-cruciform primary cremations probably belong to the period c.630–570 BC (phases 3–5), but all the evidence for above-ground variability has been lost.

Returning to the Ag. Triada cemetery the V score in phase 6 (c.570–550 BC) is quite low, at .1915. Except for gr.C 458 with tomb p, all the adult graves come from the remarkable Mound G plot. Mound G is the biggest known Archaic tumulus, made up of

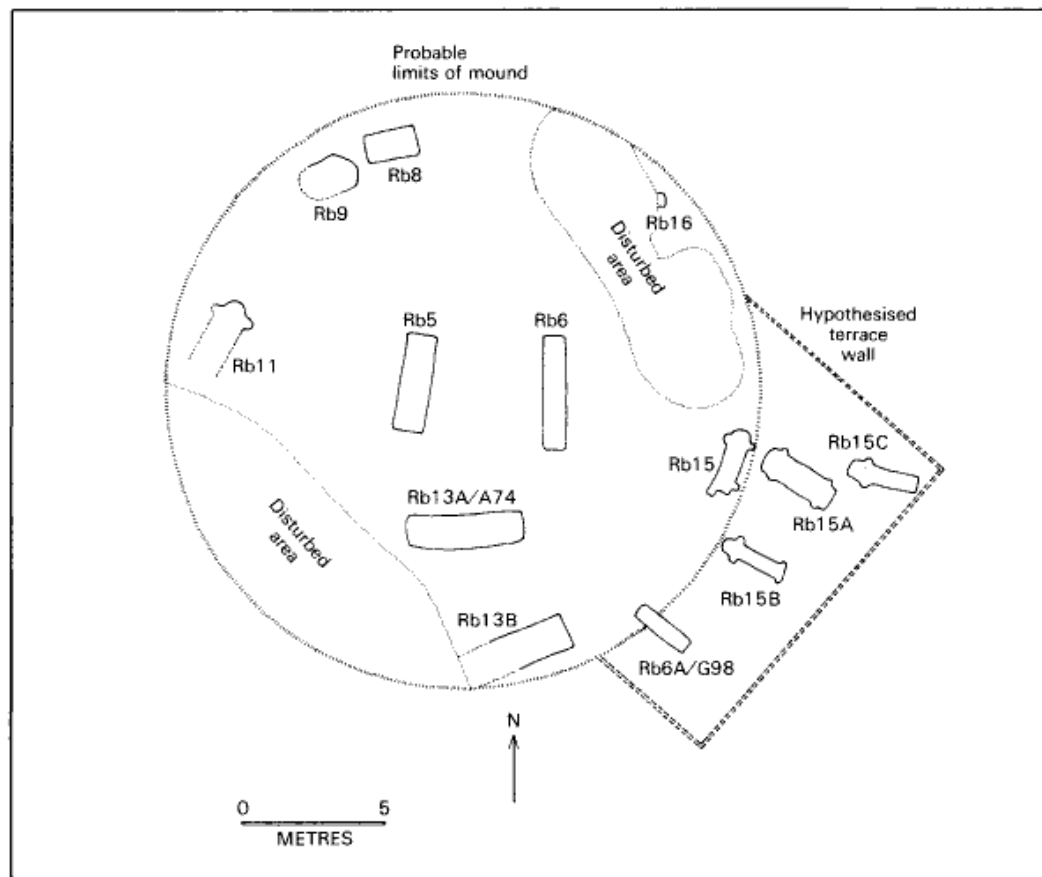
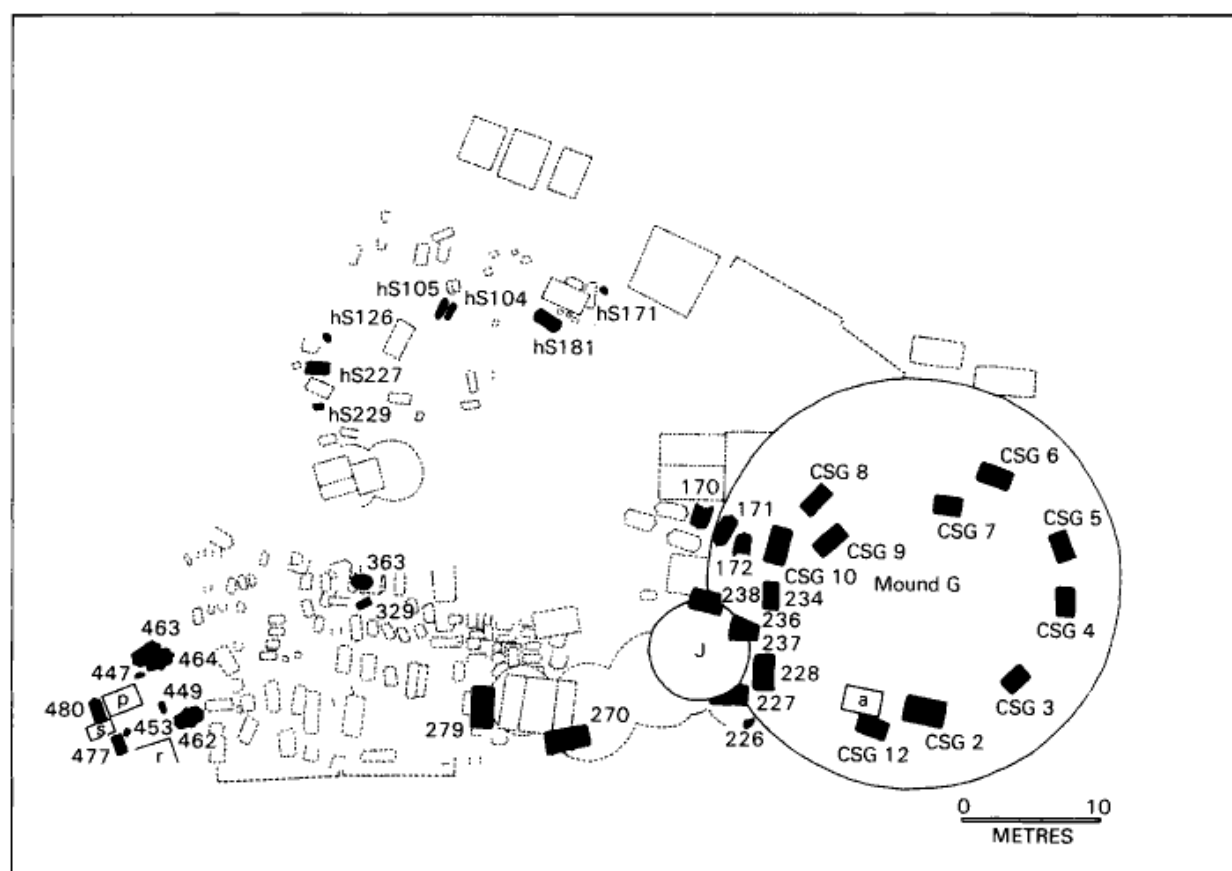


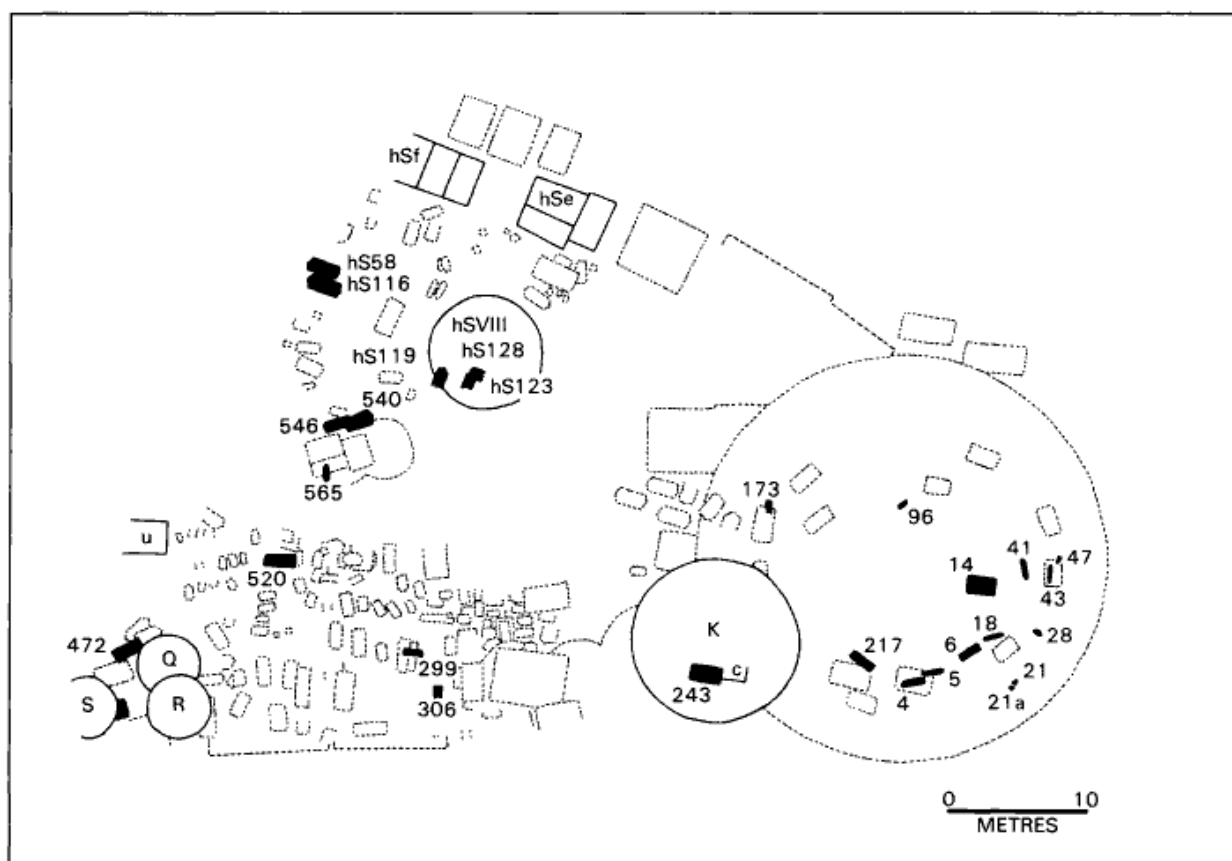
Fig.44. The Rundbau plot (after Knigge 1980, fig.7)

2,600 m³ of earth. The occupant of gr.CSG 1, beneath it, must have been an important man; some have suggested Solon himself, or a member of the prominent Alcmaeonid family. Unfortunately, there is little evidence to set against this exceptional plot. A few graves have been found under the South Mound and in the Eckterrasse, but there seems to have been little activity south of the Eridanos. Judging from the stone grave markers of this period built into the fifth-century city wall of Athens (Willemssen 1963; Königs 1980), the north bank was an important cemetery too, but very few intact graves have been published. It is clear that grave markers were getting much more lavish by 550 BC, but there is little evidence for the structure of the cemeteries.

Fig.45. The Kerameikos Ag. Triada Archaic cemetery: (a) phases 6 and 7. Graves not marked hS or CSG have the prefix C



a



b

There is a big leap in phase 7 (c.550–525 BC), with a *V* score of .3755. Much of this is due to greater variety in burial forms, and the appearance of very simple pit inhumations (hS 104, 105, 229), which become dominant at the end of the sixth century. At the same time, impressive shaft grave burials continue on Mound G. If anything, still greater variety is masked by the destruction of many stone grave markers in the area around Mound J (Kübler 1976, 63). Near the end of the phase the huge South Mound was heaped up over gr.HW 87.

In phase 8 (c.525–500 BC) the *V* score actually falls to .3220, but this is nevertheless the time of the most radical transformation since 700 BC. The qualitative aspects of the changes cannot be over-emphasised: Stupperich stresses that no family relationship can be seen between the Archaic and the Classical graves (1977, 82), and Knigge argues strongly that the final sixth-century and fifth-century 'common cemetery' is unrelated to the sixth-century shaft graves in the South Mound area (1976, 14). The changes are foreshadowed in the Sacred Way graves in phase 7, but the final transformation, c.510 BC, is a revolutionary one.

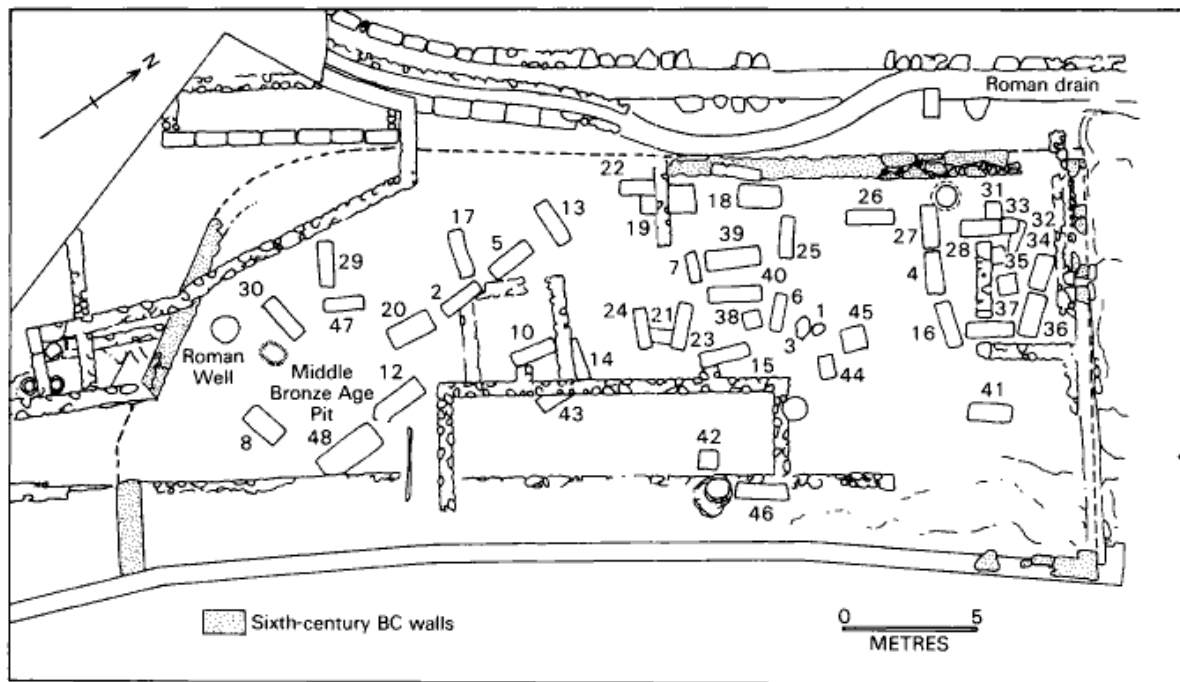
Outside the Kerameikos, evidence is scarce until about 550 BC. Nearly all the published seventh-century graves at Athens are children, usually with one or two small vases, although Kriezi St gr.1968/4 had none. The few adult graves reported from the Olympieion and from Aristotelous, Athinas, Kriezi, Peiraios and Sapphous Sts are all very similar to the Kerameikos types; the Late Geometric contrasts between cemeteries disappeared quite early in the seventh century, although inhumation in pit graves continued for a while in some parts (Peiraios St gr.1967/15; Aristonikou St; perhaps Agora gr.B21:2).

The largest published group from Athens is the Agora Archaic cemetery, with a high *V* score of .4612 for the whole period c.560–500 BC. It is unfortunate that most of our knowledge of late sixth-century burial comes from Mound G, the South Mound and the Agora cemetery, all such impressive cemeteries.

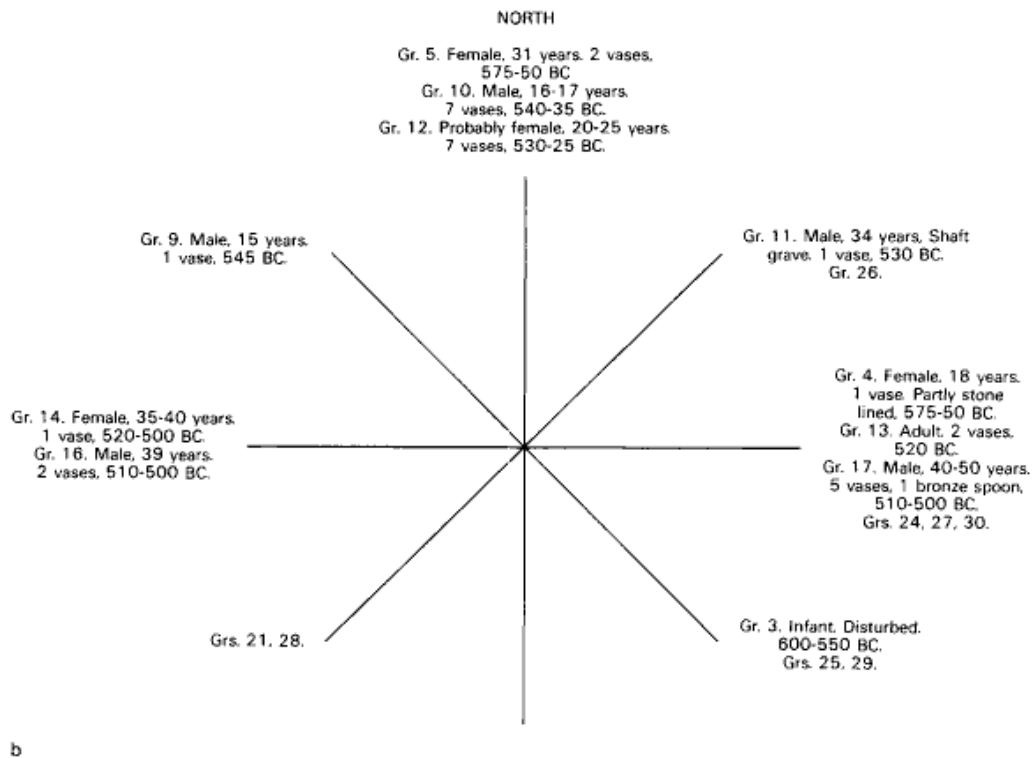
An intriguing feature is that most of the Agora variability is again in orientation, just as in Late Geometric, without any obvious links between alignment and age, sex, date, grave form or furniture (see fig. 46b).

Several cemeteries came into use at Athens just before 500 BC, but on the whole these are not very well published, and the evidence is fuller when we turn to other parts of Attica. At Thorikos, *V* fell from .2765 to .0700 after 700 BC, although, as noted earlier, much of the Archaic variability must have been destroyed by erosion. Two undated cremations similar to those in the D 52 area were found in the South Cemetery along with one dated to the mid-sixth century, and a destroyed adult grave of the early sixth century turned up near the theatre (see fig. 21b above).

The grave groups excavated at Votanikos were in all but one case (gr.T 6) primary cremations, differing only in their air vents; only T 6 and gr.K 9 (c.550–540 BC) had any grave goods. Small numbers of seventh-century adult burials have been found at Anavyssos, Draphi, Kalyvia Kouvara, Spata and Tavros, but these are always either too poorly known or too few to be useful. The chronology is a little vague at Velanideza, but the graves seem to form three temporally distinct types, with little structure. The



a



b

Fig.46. (a) The Agora Archaic Cemetery (after Young 1951, fig.1) (b) Orientation of the burials in the cemetery

mound probably dates to c.550, and gr.H is of course distinguished from E and Z by it. There are more differences in personae within the burying group at Vourva ($V = .2700$), although some of these may also be due to diachronic change. The heap of stones over gr.Γ is unusual. After the mound of earth was heaped up over gr.Δ, gr.H differs from E and Z. It is not clear which grave the celebrated Phaidimos kore belongs with.

The most important cemeteries are at Vari. The 1962 and 1964 excavations in the East Cemetery found some seventh-century graves, but a few intact burials and a scatter of sherds show that the area was in continuous use from Late Geometric times. The 1962 plot has a very high V score (.2960), but this is partly created by post-depositional disturbance. A scatter of stones east of grs.15 and 16 suggests that more graves were marked by tombs; and quite possibly all the adult graves had low mounds like those in the seventh-century Kerameikos. Kallipolitis spoke of a low mound over the whole cemetery (1965, 112), which may represent a build up of mounds similar to Kerameikos mounds A–H over grs.A 2–8. This would also be the best explanation for the rise in ground levels in the plot; grs.1962/4–8 were cut into one another from successively higher surfaces, and the top of the cuttings for grs.5–8 was considerably higher than that of grs.11 and 14. The superimposition of the mounds is the most plausible explanation for this. Unfortunately, the area was disturbed by mechanical diggers, and stratigraphic excavation was not attempted (Kallipolitis 1963, 115; 1965, 112). Karagiorga-Stathakopoulou's comment (1978, 24) that the Votanikos graves were dated stratigraphically may imply a similar build-up of mounds there in the seventh century.

The main attributes partitioning the graves at Vari are orientation (probably related to descent group membership), the form of the air vent (partly a development through time) and the presence of vases in the grave.

The low V score of the 1964 plot (.1238) is rather more typical of the seventh-century cemeteries. The period after 575 BC is not well known in the East Cemetery. Only a small dig in 1961 explored the main area of the sixth- to fourth-century cemetery, and here most of the graves were looted. Grs.1962/17 and 1964/51β are sixth-century adult cremations, but 1961/XX was the only intact burial from the main area. This was a pit inhumation in a wooden coffin. The bulk of the Black Figure graves are children in pots, and are very uniform.

There was certainly some variety in the North Cemetery, which seems to have begun only in the late seventh century. Some graves were under very large mounds, and at least one of these is as early as 620 BC. Six or seven graves had large tombs; later sixth- and fifth-century graves were inhumations, but all the pre-550 graves seem to have been cremations. This cemetery remains poorly known.

A considerable number of graves dated c.550–450 BC were found in the enclosure in the north part of the cemetery. There was a combination of inhumation and primary cremation, using a variety of alignments. Some graves were secondary burials on large mounds, and others were marked by sculptured monuments. The evidence is tantalisingly vague, but the cemetery of the later sixth century seems to have been far more varied – and probably far more structured – than the earlier Archaic graveyards.

A small plot dated c.550–500 BC was excavated at Liopesi. No information is avail-

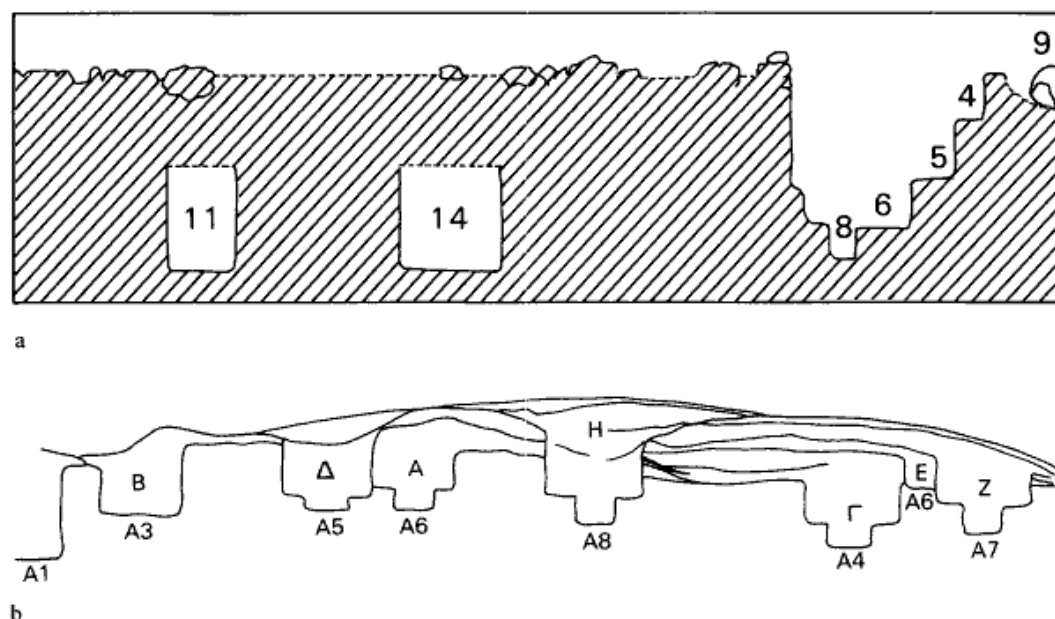


Fig.47. (a) Schematic east-west section through the Vari East cemetery (after Kallipolitis 1963, fig.2)
 (b) East-west section through Kerameikos mounds A-H (after Kubler 1959, fig.6, section ABB', CDD'D')

able on grave furniture and orientation, but the group breaks down into three main adult elements: one cist grave, six tile graves, and one bronze urn cremation; and eight undifferentiated child vase burials. This cemetery seems to fit the pattern of considerable diversity in late sixth-century adult burials, but little variety in child graves.

In the small plot at Plakes Souniou, the main distinctions are of age, with pithos inhumation and primary cremation being practised. Sherds of two vases were found in cremation gr.4 and none in grs.1–3, but no other differentiation is known, and the exact dating of the graves is uncertain. A few adult burials are known from Eleusis and Phaleron in otherwise undifferentiated child cemeteries (Phaleron, $V = .0612$; Eleusis West Cemetery, $V = .1813$, although this conflates several plots). As such, they are perhaps likely to be deviant or at least unusual personae (Binford 1971, 23).

Conclusion

The evidence for variability is consistent with the expectations of the model suggested in Chapter 5. In this concluding section, I will briefly discuss various other possible explanations for the changes in mortuary variability. The argument of Chapter 5 demanded that variability should rise and fall in tandem with the changes in age structure and adult group size of the plots and cemeteries; and, to a great extent, this seems to happen, although some qualifications are called for. In particular, we should note the uniformity of Kerameikos Zeitstufe 1 (Early Submycenaean), succeeded by the very complex Zeitstufe 2 cemetery; and the fairly steady increase in variability throughout the sixth century until the sudden expansion shortly before 500 BC. An additional factor made very clear in the analysis is the great regional variety within Athens and around

Attica in Late Geometric, as compared to the consistency in practices, with the possible exception of Dark Age Eleusis, in Protogeometric to Middle Geometric and Protoattic to Black Figure.

Some archaeologists, following Kroeber's lead (1927, 314), might want to dismiss variability as a product of 'fashion', dissociated from the 'serious' aspects of society. But such a position cannot be maintained in the light of seventy-five years of anthropological and historical studies of behaviour in the face of death. As was stressed at the start of Chapter 2, mortuary variability is not simply a consequence of the emotional responses of the buriers, acting independently of their cultural environment. I am not arguing that the bereaved act mechanically according to other survivors' concepts of what is proper; the tragedy of loss and individual grief will always create what is, from the hard-hearted analyst's point of view, 'noise'. What I would suggest, though, is that the forms and conventions of expression are part of social structure, and that breaking the rules can be assumed to be a fairly constant background in the period studied. The growth of 'individualistic' funerary behaviour is a particularly modern western phenomenon, no doubt associated with the emergence of a social structure where the potential for mobility is heavily emphasised (Parker Pearson 1982; see also Gittings 1984), and where the rite of passage structure is loose. Even today, though, individual behaviour is heavily constrained by expectations and canons of 'good taste' (Blauner 1966; Huntington and Metcalf 1979, 198). In ancient Greece, stepping outside the bounds of convention incurred disapproval – we might note Homer's criticism of Achilles for being too extravagant (*Iliad* 23.176); or Thucydides' description of Athenian treatment of their dead as 'shameless' during the plague years of 430–428 BC, although it was surely necessary (2.52.4); and the humour of Theophrastus' figure the Miser depended on the audience assuming that a rich man would always choose to be cremated (*Characters* 4.49).

However, other explanations of variability are possible. Braun (1981, 409–10) points out that having periods of uneven length will tend to make the longer spans appear more complex; but, as we have seen, if anything the reverse is true here, with the most complex periods being among the shortest. O'Shea suggests three main forms of explanation for changes in variability through time (1984, 256–85). None seems appropriate here.

a. Social complexity Following Saxe and Binford, an increase in the range of social personae expressed in the cemeteries, as occurred c.750 and 510 BC, could be a consequence of an actual increase in the organisational complexity of the living society. Such an approach was implicitly adopted by Cavanagh, who wrote of the Late Geometric burials, 'the complicated pattern of the practices which resulted, traces the complicated fabric of society at this time' (1977, 395). The greater variability and structure of the Late Geometric cemeteries might reflect directly an increase in the complexity of the institutional web of social reality. This would certainly fit some reconstructions of eighth-century history. But what of the sudden increase in complexity c.510 BC, or the dramatic collapses in structure around 1050 and 700 BC? Few historians would accept the possibility of a major simplification of Athenian society in the early seventh century.

Similarly, it is very difficult to accept a sudden and massive increase in complexity just before 500 BC.

The changes in variability between 700 and 500 BC cannot be linked in any simple and direct way with the organisational complexity of Athenian society. I would suggest that the same is probably true for 1100–700 BC. Some evidence will be considered in the next chapter. It may seem improbable that Athenian society became more complex c.1100, only to collapse into a very homogeneous, egalitarian society around 1050 BC. A more subtle approach to variability is called for.

b. Symbolic change The possibility of diachronic changes in the amount of archaeologically visible funerary symbolism cannot be completely discounted. It was argued in Chapter 3 that the literary sources of the eighth to sixth centuries point to a high degree of redundancy in burial practices, making it unlikely that temporal changes in forms would seriously affect the value of the archaeological record. We cannot be certain that this also applies to the eleventh to ninth centuries, but it seems a reasonable assumption, given the evidence for continuity in attitudes and forms of expression from at least the late tenth to the eighth centuries.

c. Levelling ideologies Another explanation might be framed in terms of ideology – in particular, an ideology like that of the citizen estate of the Classical polis, and denying the existence of significant differences within the burying group by creating equivalent social personae for all its members. The identification of ideologies is a complex matter, and there is no *a priori* reason to dismiss such an explanation. An ideology of this kind could theoretically account for the changes in variability, although (as will be seen below) ‘levelling’ ideologies in Archaic and Classical Greece rarely produced such a decline in structure as is seen in the Dark Age and seventh century.

In the next chapter, the symbolism of the cemeteries will be investigated further. It will be argued that the evidence is not consistent with any of the alternative accounts of mortuary variability suggested here, and that restrictions on formal burial constitute the best explanation of the patterns.

Symbols and display

Grave goods

Throughout this study, I have stuck to what I see as the basic rule in the study of ancient symbolic systems:

The indices in non-verbal communication systems, like the sound elements in spoken language, do not have meaning as isolates but only as members of sets. A sign or symbol only acquires meaning when it is discriminated from some other contrary sign or symbol.

(Leach 1976, 49)

Changes in the structure of whole systems can be studied through time and analysed along such axes as are felt to be relatively constant (e.g. demography), and the changing structures of formally different systems of symbols can also be contrasted in space, to try to understand some of the behaviour generating them. We cannot isolate systems and attach particular meaning to symbols. The failure to bear in mind that the formal properties of the funerary record and their signification were not constant through time and space in ancient Greece has vitiated many attempts to understand the evidence.

But having said this, we must also recognise that symbolic practices are never simply arbitrary, and within a social system some material objects may evoke a similar response from most people whatever their context of use. The archaeological problem is of course that symbolic evocation cannot be recaptured, and cross-cultural generalisations seem impossible. No one can ever tell for sure whether the gold so abundantly employed in the fourth millennium BC cemetery at Varna was already the ultimate value, but in our case the literary sources again come to the rescue. In early Greece, metals were ranked in prestige: for Homer, metals are *keimēlion*, treasure, in a descending order for gold through silver and bronze to iron (see I. Morris 1986b); and one reading of Hesiod's Myth of the Five Ages (*Works and Days* 106–201) would see him associating the four metals with different levels of the worlds of the gods, spirits and men in a complex homology (Vernant 1983, 3–72).

A further proposition can be derived from the exclusion argument and tested on the archaeological record. In Protogeometric to Middle Geometric and Protoattic to Black Figure, when only the *agathoi* are thought to be represented, 'wealth' in grave goods should be more evenly distributed among the burials than in Submycenaean, Late Geometric and Early Red Figure. The mean number of grave goods per burial does in fact increase in Protogeometric to Middle Geometric (see table 9), but it is their distribution within the particular symbolic system which is important here.

Table 9. Mean numbers of artefacts per intact adult burial at Athens, 1125–700 BC

Period	Vases	Metal
Submycenaean	1.3	1.7
Protogeometric	4.9	1.8
Early and Middle Geometric	6.9	2.8
Late Geometric	6.8	0.8

As always, several problems must be faced before analysis can proceed. First, the analysis cannot be extended past 700 BC, since grave goods went out of use, at least for adults, during most of the Archaic period in Attica. Vases were sometimes placed in *Opferrinnen* outside the grave, which hardly ever survive *in situ*. Metal grave goods were virtually unheard of between 700 and 500 BC. There is a bronze bowl from Thorikos gr.13 (c.600 BC), and an iron wedge from Kerameikos gr.LZB 1 (c.675–650 BC). Both were child graves. A few metal objects come from disturbed graves in the Kerameikos. Kübler published an early seventh-century gold band from the fill of Mound G (1970, 403 and 559), probably from a destroyed grave in the area between gr.PG22 and the Plattenbau (Kübler 1954, 5; 1964, 157–8). Snodgrass noted a huge seventh-century iron spearhead, probably ceremonial (1964, 133), and Ohly described a group of gold bands which might possibly be seventh-century (1953, 10–12, nos. A3, 19, 21, 23). Other than Kerameikos gr.hS 59, a cremation in a bronze urn (c.600 BC), there is no evidence of metal in an adult grave in Attica between Kerameikos gr.A 74 (c.675 BC, but belonging to the end of the Late Geometric tradition) and gr.CSG 2 (c.550 BC: an iron spearhead). The move away from grave goods may also cause problems with the Late Geometric evidence, which will be considered below.

The distribution is measured by Gini's coefficient of inequality (G), expressed visually in Lorenz curves. If the distribution of grave goods was entirely even, such that 90% of the graves accounted for 90% of the grave goods, 50% for 50%, and so on, the Lorenz curve for the series would have the formula $y = x$ (the diagonal line in fig. 48). The extent to which the Lorenz curve for a particular period diverges from the diagonal line is a measure of how far the distribution diverges from equality. This statistic seems more suitable for consideration of changes in distributions through time than Hodson's 'status score' (1977, 406) or the various inferior methods discussed and rejected by Shephard (1979, 56–8).

Two assumptions are necessary. In this and subsequent examples, I treat all metal grave goods as equivalent in importance. It might be possible to establish a crude 'conversion table' for gold, silver, bronze and iron from references in Homer, but it is not clear how far metals at different levels were seen as interchangeable, and in any case the objects of precious metal tended to be much smaller than those of base metals. Weights of grave goods are hardly ever available. Treating the objects as equivalent is of course a simplification, but it does not distort the most significant aspects of the pattern.

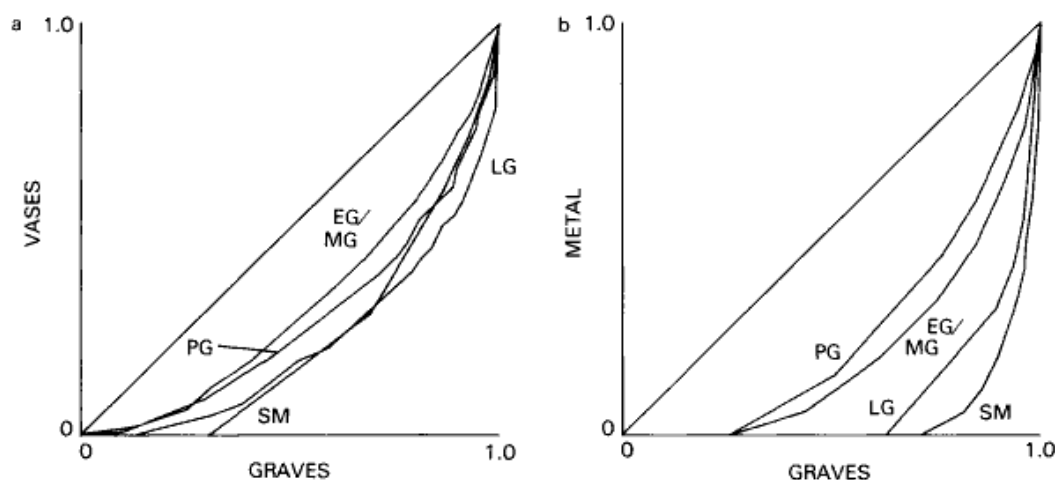


Fig.48. Lorenz curves for the distribution of (a) vases and (b) metalwork in Athenian adult graves Submycenaean to Late Geometric

The second problem is that G is a measure of inequality within whole populations, not samples. As such, we cannot treat the burials as a sample of the set 'burials originally made at Athens', and then attempt to establish their representativeness statistically; we must treat them as the whole population 'burials known from Athens', and try to establish the substantive significance of the results by independent means.

Figure 48 therefore illustrates that the distribution of grave goods was more equitable in Proto-geometric to Middle Geometric than in Submycenaean and Late Geometric, among the burials we have. G gives a more precise assessment, measuring the area above the Lorenz curve and below the diagonal. The whole area below the diagonal is given a value of 1, and G is expressed as a proportion of that area. The nearer 0 the value is, the more even the distribution; as the value approaches 1, the distribution is becoming more unequal.

We may immediately note from the G values in table 10 that the distribution of metal goods was at all times more unequal than that of pottery, and that in both dimensions of measurement – with the sole exception of pottery in Late Geometric II – the Proto-geometric to Middle Geometric period has a more egalitarian distribution of grave goods than Submycenaean and Late Geometric.

The G values summarise the data neatly, but there are problems of interpretation. In particular, the trend away from grave goods in the late eighth century may exaggerate the inequality of the Late Geometric distribution. This trend is shown in a crude form in figure 49. The Gini values for Late Geometric I and II taken separately are always lower than those for Late Geometric as a whole. The obvious decline in mean numbers of grave goods in Late Geometric II shows that even when the distribution remained constant, combining the two periods will produce an inflated G score.

There are further problems with Late Geometric. The trend away from grave goods was not uniform at all Athenian cemeteries, let alone across Attica as a whole. However fine our chronology, we would still be observing and conflating several different stages of a diachronic process.

Table 10. *Gini's coefficient in inequality for intact adult burials at Athens, 1125–700 BC*

Period	Vases	Metal
Submycenaean	.525	.879
Protogeometric	.441	.502
Early and Middle Geometric	.377	.582
Late Geometric I	.566	.708
Late Geometric II	.353	.764
All Late Geometric	.599	.805

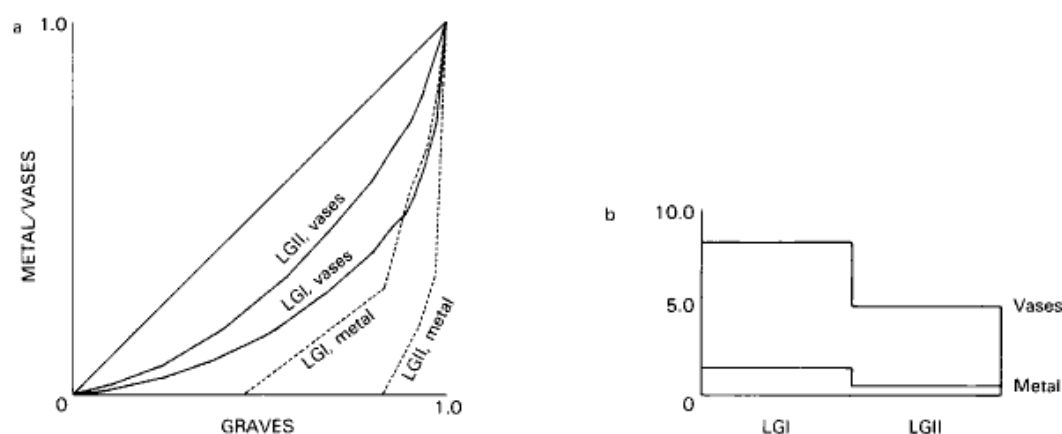


Fig.49. (a) Lorenz curves for the distribution of vases and metal in adult graves at Athens in Late Geometric I and II (b) Mean contents of adult graves in the same periods

Snodgrass (1971, 150) and Coldstream (1977, 137) have both spoken of the impoverishment of the Kerameikos relative to the Kynosarges, Dipylon and Kriezai St cemeteries in Late Geometric I. In IIa, the Dipylon and Kriezai St cemeteries begin to decline, while a new wealthy plot appears on Erysichthonos and Nilios Sts, and the Kynosarges continues to have gold. By Late Geometric IIb, the richest graves come not from Athens but from sites like Koropi, Merenda, Spata and Menidi. Given the general decline in grave goods during Late Geometric and their abandonment after 700 BC, this pattern is perhaps best interpreted not as a 'decentralization of wealth' (Coldstream 1977, 133) but as rural areas in Attica lagging behind Athens in the adoption of a new symbolic order. Any pottery phase, from Late Geometric Ia to IIb, will cross-cut a number of different stages in this process, and will produce an inflated value for *G*.

The problem deserves fuller analysis, but it does not invalidate the conclusion that the distribution of grave goods was more uneven in Submycenaean and Late Geometric than in Protogeometric to Middle Geometric. This confirms the expectations of the model of exclusion, but it is not the only interpretation which can be put on the *G* values. It is often assumed that Greek society was very undifferentiated between 1050 and 750

BC, and one obvious reading would be that the Protogeometric to Middle Geometric graves represent a full spectrum in a very egalitarian society, rather than just the top end of a very hierarchical system. However, three other classes of evidence allow us to reject this line of argument.

Entropy

Looking at burial evidence as a system of non-verbal communication, Saxe suggested that in egalitarian systems the key diagrams for cemeteries should be paradigmatic, where each componential definition is a 'minimal classification event' (1970, 75–6). In a perfectly paradigmatic key, access to different features of the symbolic system would be completely random. Saxe borrowed the concept of entropy, or 'disorganisation', to measure egalitarian tendencies. He defined entropy as 'shuffledness' (1970, 104).

Entropy has been used in slightly different ways by Tainter (1977; 1978), Goldstein (1981) and others. Entropy is seen by Goldstein as an index of differential classification. Like all the sociometric aspects of the New Archaeology, the enthusiasm for entropy scores is sometimes questionable; but again the method itself can fruitfully be used in pursuit of different goals. If Protogeometric to Middle Geometric society really was egalitarian and was directly reflected in burial customs, we should expect entropy to have been high. Figure 50 shows that this is not the case, at least in the Kerameikos. The average scores cluster fairly tightly in the region 0.5–0.6, and, as we should expect, the level of entropy falls in Archaic times.

The entropy scores are suggestive that the variability in grave goods and burial prac-

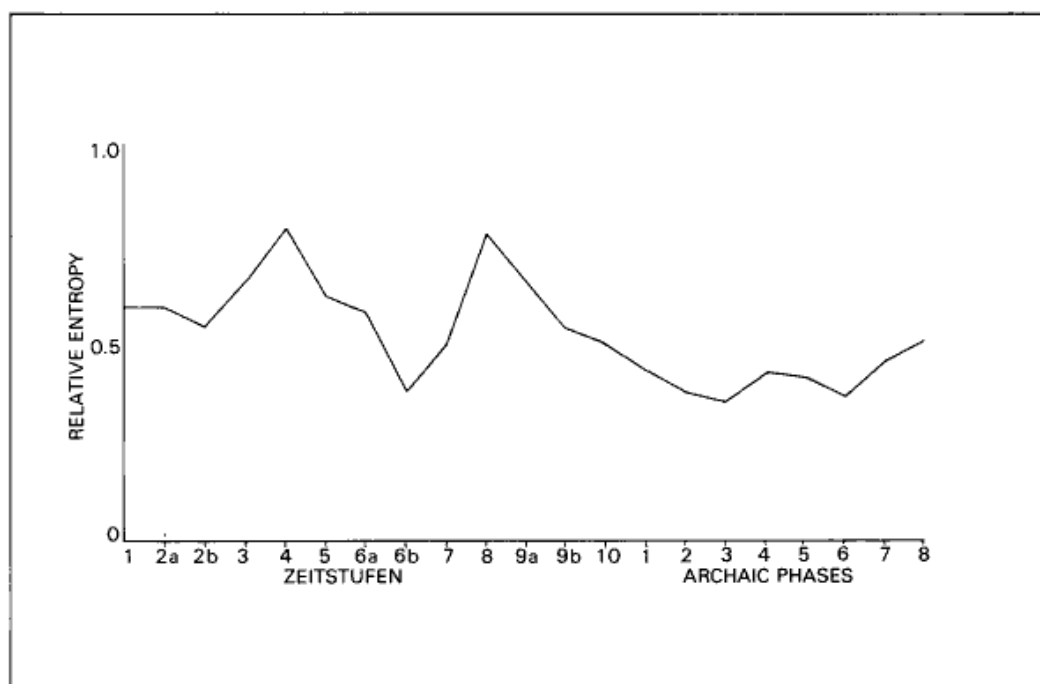


Fig. 50. Relative entropy scores for the Kerameikos adult burials, 1125–500 BC

tices as a whole is not simply a by-product of social evolution. Goldstein (1981, 55) urges that we should not take entropy scores in isolation, and this seems very wise; so now we will turn to what little independent evidence there is for the scale of social organisation in Dark Age Greece.

Settlement size

The obvious place to look for evidence of organisational complexity is in settlement sites. Within-site variability in the construction of houses and the use and disposal of artefacts is not the best way to approach the problem, since the organisation of domestic space carries meanings every bit as complex as those of the burial record (Moore 1986). But this is no great loss, since there is after all next to no evidence of this type available from Attica, and little from Greece as a whole. The *population* of settlements will be a better index. It has been argued that the number of inhabitants of the largest communities in a social system will provide a rough guide to the complexity of organisation (Carneiro 1967; Naroll 1956, 693).

The fissioning of groups because of their inability to cope with the scale and variety of interactions of everyday life, well before they pass the optimum carrying capacity of the area they inhabit, has been well documented for societies as far apart as New Guinea and the fierce Yanomamö of northern Brazil (e.g. Forge 1972; Chagnon 1982). The argument I wish to make is based on the proposition that *homo sapiens* can only handle successfully a finite number of very intensive face-to-face relationships (Forge 1972, 375). Communities of less than 100–150 individuals lack much structural differentiation; usually the most basic relationships of the household, affinity and reciprocal assistance are capable of ordering social interactions (Forge 1972, 371–2; Fried 1967, 112–13).

Above this size of community, in groups of 150–350, it is harder to handle at a purely personal level all the relationships which will be entered into in social life, and sub-groups of a higher level than the household appear. These may be demarcated residentially, and they allow members to enter into relations with a larger number of individuals than previously. Intense personal relationships occur as before with people both inside and outside the individual's own clan, while these 'mediating structures' allow the individual to relate to a further large group of people in a less intense way, on the basis of clan or sub-clan membership.

Communities below the threshold of 350–500 members are not usually associated with systems or organisation involving ascribed status and social stratification. Rather, rank status tends to be achieved by the individual without the aid of a system of established offices, through his (but only rarely her) own efforts. In settlements of 500 and more people, constituted offices, with access to them restricted to the members of particular descent groups, begin to emerge, with permanent social and economic inequality (Forge 1972, 373–5; Layton 1972, 379. Foster (1960, 178) suggests 1,500 rather than 500 for such a threshold). People in such societies obviously still have ties of blood relationship and affinity, just as in acephalous communities. The emergence of large communities does not substitute 'contracts' for personal contacts (or *Gesellschaft* for *Gemeinschaft*), but rather new higher levels of integration, including hierarchical status, encompass and redefine these aspects (Smith 1976a, 17–18). Above 500 or so

individuals, an agrarian community will start to take on the characteristic features of peasant society, including the division into two socially stratified groups (Smith 1976b). Often, though, there is little difference in purely economic terms between the members of different social strata, and it is only if the elite can in some fashion control access to a vital resource – typically, the land – that they can constitute themselves as a class as well as a status group.

Unless social organisation undergoes changes of this sort, as a community approaches each critical level, it tends to fission into new and smaller settlements.

Quantification of the population size of Early Iron Age communities might then provide us with further clues about the organisation of society. The main problem is that little is known of the internal layout of the largest settlements, beyond the near certainty that most mainland sites consisted of clusters of houses separated by open spaces. The cemeteries of Athens are scattered over an area of at least 200 hectares, while Knossos covered 100 hectares and Argos probably 50. The lack of substantial excavated house remains at these sites means that calculation of densities is difficult; but even if the density of the occupied parts of the site was low – as seems to have been the case at Asine (B. Wells 1983) – and wide areas were left open, it is hard to envisage Dark Age populations below 1,000, let alone 500, at the largest sites. Indeed at Knossos, the old picture of a scatter of small villages with accompanying cemeteries is now being replaced by one of a single settlement west of the Palace, delimited by the North and Gypsades cemeteries (see Hood and Smyth 1981, 14–16; Coldstream 1984). Subminoan settlement material has turned up 350 metres west of the Palace, although the area perhaps then went out of use in Geometric times (Warren 1983; 1985). Even if Knossos was not so densely occupied as other Cretan sites such as Karphi, Vrokastro or Phaistos, the Dark Age population must surely have numbered a few thousands.

In the excavated settlements, density of occupation generally seems to have been higher in the Cyclades and Crete than on the mainland, although this may be due to most of the island sites being on terraced hillsides or small plateaux. There was equally obviously great variety within regions, but the tiny populations of Dark Age sites like Nichoria, Koukounaries or Donoussa should not be allowed to distract us from the main settlements (sadly, those most frequently buried by later habitation) where occupation was extensive. Small hamlets also existed in later periods; as noted earlier, the population of Lathouressa in Attica was probably never more than thirty to forty people in the seventh and sixth centuries.

Such estimates provide only a very rough order of magnitude. Dark Age sites were probably normally smaller than those of the Late Bronze Age. Snodgrass implied a general decline in size of about two-thirds on the basis of a comparison of graves from Lefkandi and Perati (1980, 18–19; 1983, 167–9). The assumptions behind such a method are questionable, but even if we accept the results, we should conclude that the major Dark Age sites are likely to have had a few thousand inhabitants. It has been argued that even Tiryns and Mycenae covered only 24.5 and 30 hectares respectively in the thirteenth/twelfth centuries (Kilian 1978, 468) – perhaps a population of 5,000–9,000? – but a 60–70% decline would leave Dark Age centres well above the critical thresholds described above.

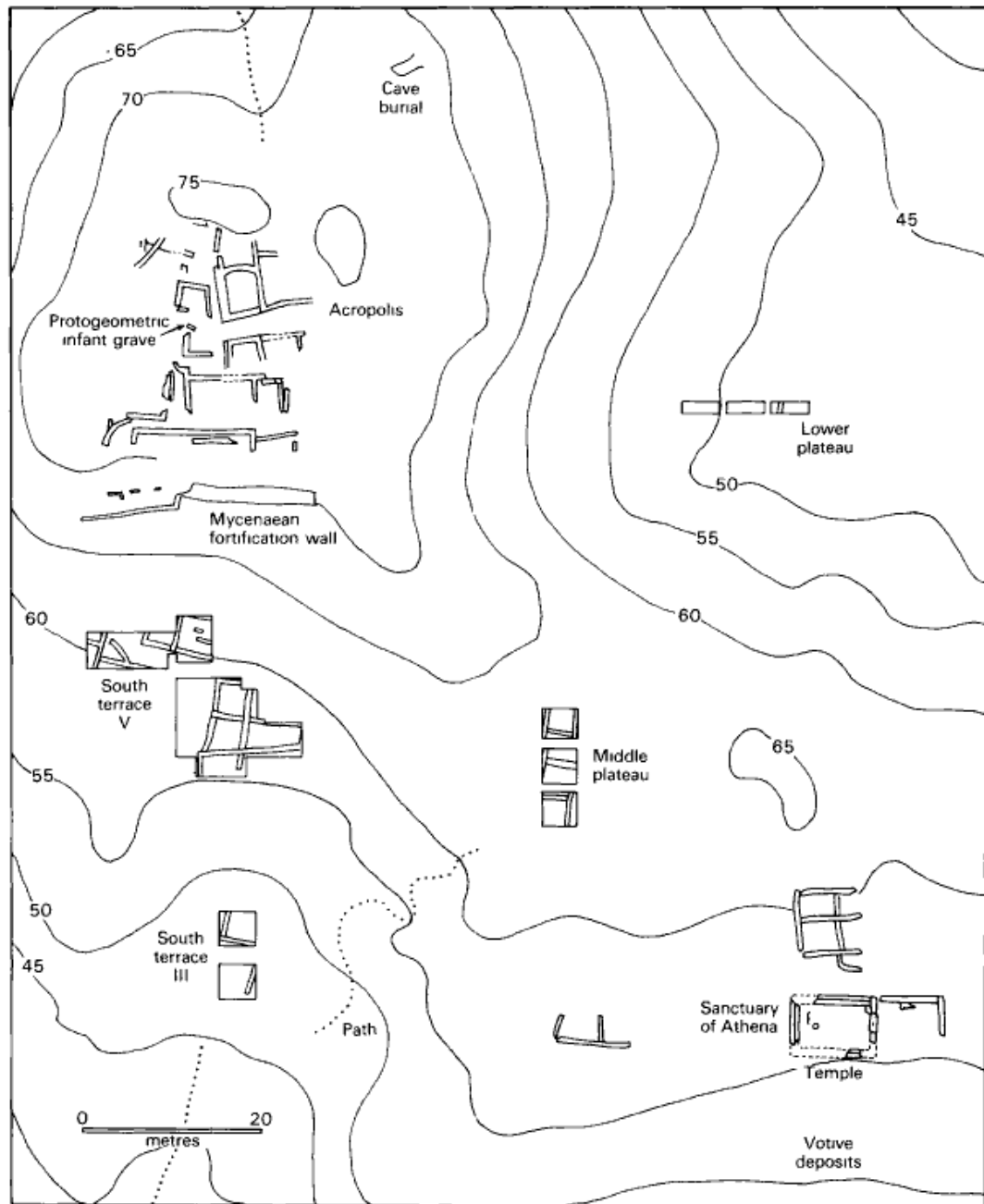


Fig.51. The eighth/seventh century settlement of Koukounaries on Paros, as excavated up to 1985. Koukounaries was perhaps a fairly typical village site; the population may have been around 100 people. Plan by P. and S. Jona

The use of metals

One of the possible explanations for mortuary variability changing through time discussed in Chapter 7 was a levelling ideology, disguising the differences in rank and power which in fact existed, by creating an egalitarian social structure, and thus legitimating a system of inequality. This could account for the more even distribution of

Protogeometric to Middle Geometric grave goods, but there are some awkward problems. The first is that the Protogeometric to Middle Geometric pattern is very unlike that in later polis cemeteries, when we might suspect some social structure of this type. In these cases, a considerable hierarchy remains in the grave goods, but with the overall consumption scaled down; and there is always a large group of 'poor' (both relatively and absolutely) burials. The Protogeometric to Middle Geometric graves look, if anything, more like levelling *upwards* than downwards. A comparison with the sixth-century West Cemetery at Samos is illuminating. Wealthy seventh-century graves have been found here (Tsakos 1969a,b), but some sumptuary law may have come into effect in the sixth century, presumably under the famous tyrant Polycrates. Bochlau pointed to the difference between the absolute poverty of the graves and the legendary wealth of sixth-century Samos (1898, 22). Even so, a clear pyramidal structure was observed, with seven 'rich' graves (interestingly, none were adults) and about eighty with no grave goods at all. Twenty-three of the 161 graves in the West Cemetery had no marker amphorae; just five urn cremations were found, all marked by mounds; and gr.29 was marked by a very large tomb (Bochlau 1898, 20–34). If full data were available, sixth-century Samos would have very high *V* and *G* scores. Similar examples will be seen in Chapter 9, from seventh-century Corinth and Argos. Sumptuary laws seem to have scaled down consumption without ending differentiation, and considerable variety in burial forms generally continued, unlike the very uniform cemeteries of Protogeometric to Middle Geometric and Protoattic to Black Figure Attica.

The second problem is that the main difference between the grave wealth of Protogeometric to Middle Geometric Athens and Submycenaean/Late Geometric Athens seems to be the lack of very poor graves dated c.1050–750 BC (see fig. 52b,c). Of course, none of the adult graves are spectacularly rich at any time, but we should surely expect levelling ideologies to restrain display rather than to enforce it at a higher level.

I will look at metal grave goods in more detail. I select metal rather than pottery because of the problems in assessing the significance of the use of vases; we can at least point to the fact that almost all the metal used in Attica had to be imported and to the consistently higher *G* score for metals in figure 48 as evidence for its likely prestige content. Figure 53 shows the proportion of adult graves at Athens with and without metal offerings, which changes from 1:3 in Submycenaean and Late Geometric to 3:1 in Protogeometric to Middle Geometric. The changes are, at least in statistical terms, very significant ($X^2 = 22.35$; H_0 rejected at .001); and the substantive significance of the pattern becomes clear when we look at the high proportion of burials with arms or armour dated c.1050–800 BC (see table 11). Outside the Kerameikos, where graves are generally not so well sexed, we can at least say that over one-third of the generally quite badly preserved Early and Middle Geometric burials were accompanied by weapons. The messages signified by warrior burial are lost forever, but if it had any implication like that of being a warrior in the Homeric poems, the distribution of Dark Age grave goods seems to bear no resemblance to the mode of 'levelling down' which often occurred in Archaic and Classical times.

Finally, it may be possible to supplement this argument by reference to the use of metals in everyday life. I have argued elsewhere that most domestic, agricultural and

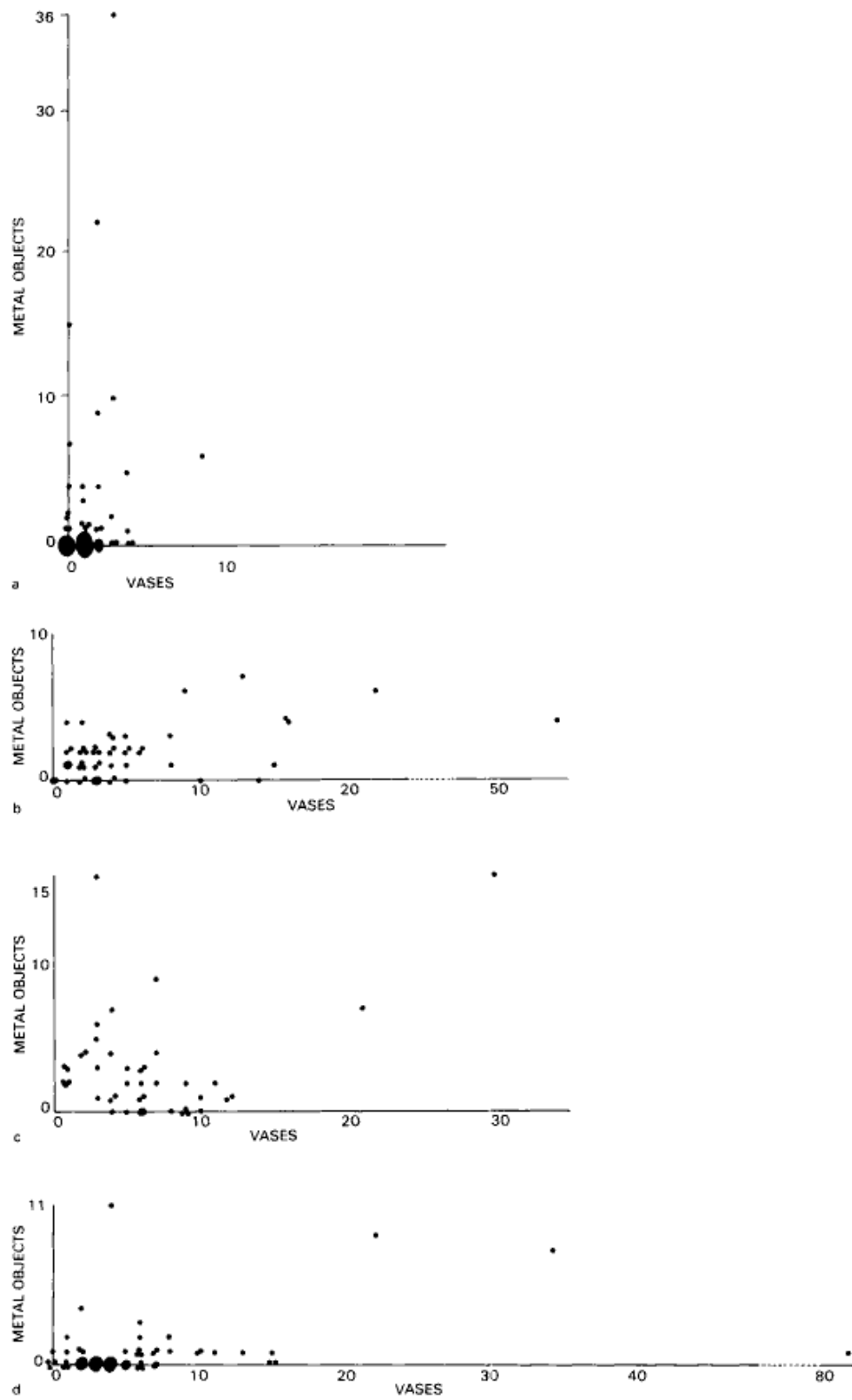


Fig.52. Distribution of metalwork and vases in intact adult graves at Athens. (a) Submycenaean; (b) Protogeometric; (c) Early and Middle Geometric; (d) Late Geometric

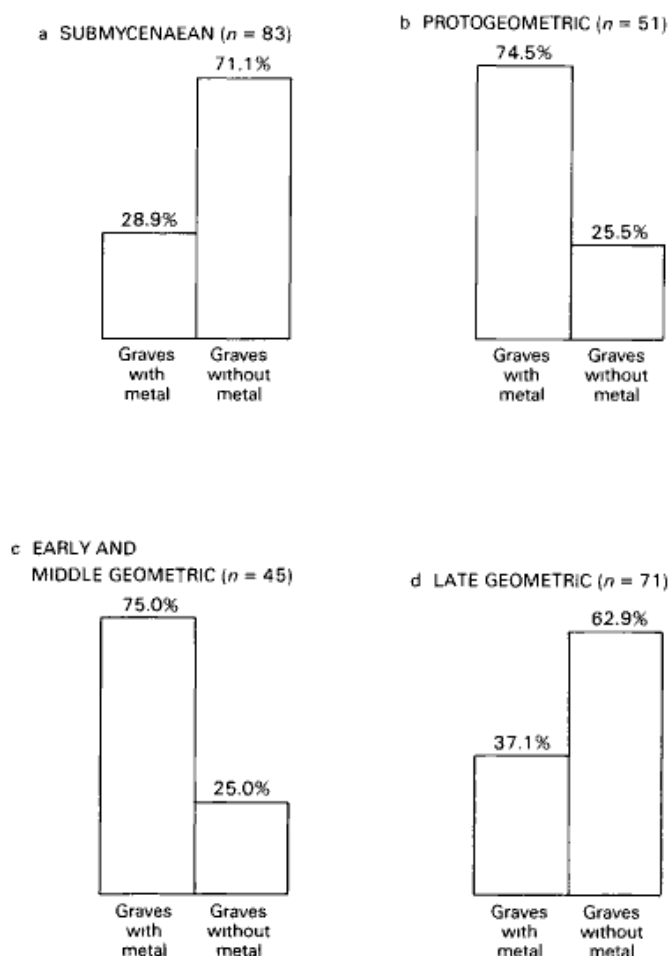


Fig.53. Proportions of intact adult burials at Athens with and without metal goods

industrial activities were carried out with implements of stone, bone or wood, and that finished objects of metal – perhaps including iron – belonged to a restricted sphere of exchange (I. Morris 1986b). Snodgrass (1980, 54–5) has suggested that the supply of metals to Greece increased dramatically in the second half of the eighth century BC, which is supported by the first indisputable evidence for the use of metal tools in stoneworking (L. Adams 1978; Brookes 1981); and further, it has been suggested that there was a breakdown in communications between Attica and the outside world between c.1025 and 950 BC, and a ‘bronze shortage’ (Snodgrass 1971, 237–9). Restrictions on access to metal artefacts, whether through monopolisation of materials or techniques, are very common in the ethnographic record (Rowlands 1971), and objects so controlled can function as powerful symbols of hierarchy (Rowlands 1973, 594). The scarcity of metal objects in settlements, even those destroyed by fire, and the great abundance of stone and bone tools, is at least suggestive that the Protogeometric to Middle Geometric graves may not have been so abjectly poor as has been supposed.

Table 11. *Intact adult male graves with arms or armour in the Kerameikos, 1050–800 BC*

16 of the 21 intact adult male graves have arms or armour; there are a further 10 disturbed adult male graves.

Phase	Arms	No arms
Zeitstufe 3	4*	—
Zeitstufe 4	2	1
Zeitstufe 5	4*	2
Zeitstufe 6a	2	1
Zeitstufe 6b	4	1

*Following Snodgrass (1973) in taking the bronze *phalara* in grs.PG 24, 40 and 43 as shield bosses.

All three classes of evidence are consistent with the argument that the Protogeometric to Middle Geometric equality is likely to be the result of exclusion in burial practices, rather than the consequence of a very egalitarian society, or a very egalitarian social structure. In the next section, the complementary evidence of grave markers will be discussed.

Grave markers

The association between grave markers and high status was made very clear by Homer, Tyrtæus, Herodotus and others; and here it will be seen that the evidence of the markers is consistent with the argument for exclusion on the basis of rank, in the same way as that of grave goods. Markers are not so easily quantifiable as grave furniture, but have the advantage of continuing in use across the symbolic divide c.700 BC.

The first deliberate grave markers known in Attica are the vases over Kerameikos grs.PG 37 and 38, about 900 BC. Monumental vases and depressions in the fill of the grave for cult activity begin very shortly afterwards, with grs.G 1 and 2.

These huge vases were the work of highly skilled craftsmen. Later in Classical antiquity, storage pithoi of comparable size were very expensive items (e.g. von Gaertringen 1909, 872), requiring much labour (Pollux 7.163). The Geometric grave markers at Athens must have been every bit as difficult and time consuming to produce, and we may assume that their distribution was accordingly limited. The pithoi in the Villa of Good Fortune at Olynthus, destroyed in 348 BC, had prices marked on them; they cost the equivalent of four to seven weeks' pay for a contemporary Athenian juror. There are of course problems in such a comparison, but the implication is clear enough: the vases were very ostentatious markers.

Unfortunately, very few cemeteries at Athens are at all well preserved. The Dipylon was badly dug, while the Kerameikos was far more carefully excavated but poorly preserved. A very high proportion of the Zeitstufe 6 and 7 graves (EG–MG I) were marked by elaborate vases (see pp. 122–4 above); and while the evidence is not very satisfactory, it seems that few graves were so distinguished in Late Geometric.

The large, quite well preserved cemeteries at Merenda and Anavyssos suggest that only a few Late Geometric graves had marker vases. At Anavyssos, they occurred with grs.65/XLV and 73/I (although 73/II and III were disturbed), while at Merenda two fragmentary marker kraters were found above gr.1967/15. Other than limited looting at Anavyssos and a pit at Merenda, all burials seem to have been undisturbed. It is of course important that no Early or Middle Geometric marker vases have been published from these cemeteries, but the ninth-century material is in both cases poorly known. It may be that the local elites in Attica did not adopt the Athenian use of grave markers until the later eighth century; but when they did, only a few of the deceased were so honoured, in contrast to what seems to have been the ninth-century Kerameikos practice.

The same restricted use of grave markers is likely for Late Geometric Athens, although again the ravages of time must be allowed for. The relative scarcity of markers in the Late Geometric cemeteries might mean that few graves originally had them, but it would be unwise to press this point too hard.

Another class of Late Geometric grave marker, the peribolos wall surrounding an individual grave, is harder to interpret. There is evidence for single graves within larger plots being picked out in this fashion at Athens in the Dipylon (Brückner and Pernice 1893, 95, n.1) and the Agora (Young 1939, 6) cemeteries, and in the countryside at Phaleron (Kourouniotes 1911, 247), Eleusis (Philios 1889, 175–7) and Anavyssos (Themelis 1973/4); while in the Kerameikos grs.G 51–63 were all enclosed by walls, forming the plot known as the 'Plattenbau'. At Anavyssos, the six peribolos graves are all 'outsize', usually richly furnished, and sometimes had a marker vase; but at the Kerameikos there is little evidence of this kind. Kübler at one point suggested that the Plattenbau was meant to terrace the slope down to the Sacred Way (1964, 176–7), although he clearly thought of the whole plot as elite (1954, 21 and 40). The message of the Plattenbau is lost forever. I would incline to see the walls as a hint that the whole descent group was considered rather special; but that can only be an opinion.

Whatever the case may have been, grave markers were definitely very limited in distribution in Late Geometric Attica. After 700, the picture changes entirely. Markers now appear with nearly all the known adult burials. The only case which can bear careful scrutiny is the Kerameikos. Here, virtually all the adult graves down to Mound G had markers. Few Archaic graves dated before the late sixth century are known from the rest of Attica.

I would suggest that most, if not all, of the published Protoattic to Black Figure adult graves should be seen as those of high status individuals. Archaic graves marked by very large mounds have been found at Anavyssos, Kalyvia Kouvara, Petreza, Spata, the Vari North Cemetery, Velanideza and Vourva; if the arguments from evidence such as Herodotus' account of Cimon's funeral in 528/7 BC are correct, these burials should be seen as elite. Possible seventh-century adult cremations without lavish markers have been found at Eleusis and Merenda, and destroyed graves at Trachones, but in all cases information is lacking. Equally, the Archaic graves at Tavros are not very useful, since they were uncovered by mechanical excavators (Schilardi 1975a, 107) and any evidence for grave mounds was lost. No grave markers were found in the D 52 cemetery at

Thorikos, but erosion had destroyed all above ground facilities (Bingen 1984, 73). The East Cemetery at Vari included seventh-century graves marked by stone tombs A and B, and was covered by a low mound. It was pointed out above that the stratification of the Votanikos cemetery could very plausibly be seen as a similar build-up of mounds.

It is very likely that nearly all of the small number of adult burials of the period c.700–525 BC had striking grave markers. Some of these were without doubt the graves of very important people, by virtue of the disruption of daily life involved in their construction. The volume of earth heaped up in the mounds could be considerable: the mid-seventh-century Rundbau mound involved 90–100 m³; Velanideza, 650 m³; the Kerameikos South Mound, 1,850 m³; and the mighty Mound G, 2,600 m³. However, most of the seventh-century mounds were far smaller, Kerameikos mounds A–H usually had just 2–3 m³, and the later seventh-century mounds and sixth-century tombs probably required relatively little labour (even mound Π was only 40 m³). Nevertheless, these markers were probably intended as monumental.

The continuity between the early seventh-century Ag. Triada plot and the less ambiguous symbolism of Geometric times and the succeeding large mounds of the sixth century is clear. Grs. A 2–8 were situated carefully, not disturbing the Geometric plots. The Protogeometric to Late Geometric cemetery very probably remained intact until the raising of Mound G, apart from the early sixth-century tombs p, q, r and s over the Plattenbau. As has been noted, mounds A–H together formed a long, low mound (about one metre high) which was covered around 650 BC by the first big mound, Θ (approximately 40 m³). These early seventh-century graves are in a direct spatial relationship to both the earlier and the later elite burials (this of course does not prove that they were elite graves, but at least shows a fundamental continuity).

A single seventh-century gold band, dated to Early Protoattic, has been found in the fill of Mound G (Kübler 1970, 403 and 559). The earth used in this mound was probably from the area between gr. PG 22 and the Plattenbau (Kübler 1954, 5; 1964, 157–8), and it is likely that another elite plot existed there. The only provenanced finds of metal from the Kerameikos at this time are with child grave LZB 1, and we might assume that the gold band came from another child or youth grave.

Mounds A–H were perhaps originally topped with stelai or vases. The rather better preserved mound P, of the same type but dated to Archaic phase 3, was marked by fine kraters. The vases associated with gr. A (Opferplatz α) show chariot processions and tripods, imagery we might be correct to associate with an elite burial; and, of course, imported Protocorinthian pottery. Gr. LZB 1 lay in a peripheral area between A 2–8 and the graves destroyed by Mound G; in it were three granary models. Again, attaching meaning to such symbols is fraught with dangers, but it is worth mentioning that many Classical archaeologists assume that this type of model was an indication of wealth and status (see Smithson 1968, 95–7). Kübler was convinced that this was a cemetery of high-ranking people (1959, 8), and that the mounds, although negligible in terms of energy expenditure, must be treated as monumental markers.

Another index of uniform and high energy expenditure might be provided by the remarkably thorough cremations. Virtually no fragments of bone at all were recovered

from the ashes (Kübler 1959, 83–5), although it is certain that the bodies were actually burned in the grave cutting. The graves regularly had an ash deposit up to 25 cm thick in them; in the case of gr.A 8, the total deposit of ash was over 1 m³. The large amounts of ash and the completeness of the cremation indicate a ceremony lasting many hours, with much additional stoking of the pyre, and only possible after great effort had been expended in collecting the fuel (see C. Wells 1960, 35, on the logistics of cremation, and Chapter 3 on the pyre as a status symbol in Homer). This thoroughness was also noted in seventh-century cremations at Thorikos and Votanikos. No pyres in other parts of the period under study even began to approach this intensity.

A small mound or stele – or even a moderate vase marker – may not have been so difficult to arrange that the bulk of the population would have been constrained from using them by purely economic factors. Mounds A–H were intended to make grs.A 2–8 *arisēmos*, well-marked, but it is not immediately clear that such markers could have been mobilised only by an elite. However, status markers need not necessarily be such that only a few members of society, given a free rationalising economic choice, could afford them; the main feature of a status symbol must be exclusivity, but this can be obtained by means other than those which we would describe as economic. The use of symbols in ritual depends on sumptuary rules, in the sense of sanctions laying down what is right and proper in the given circumstances for people occupying particular places in the ideal social structure. A good example is furnished by the Roman *ius imaginum*, the right to carry wax masks of the ancestors in funeral processions. Mommsen thought this was limited to nobles and higher magistrates. A much wider group could have made wax masks; but they perhaps did not, because of the operation of social pressures (see the discussion in Hopkins 1983, 255–6). Tyrtaeus implies that only a limited category of the dead would have an *arisēmos* tomb in seventh-century Sparta (West 1972, fr. 12.29; cf. Plutarch, *Life of Lycurgus* 27). That the status symbols of the seventh century were not so lavish as those of the sixth does not mean that their distribution was any wider. Indeed, on the lines of Parker Pearson's arguments mentioned in Chapter 2, we might even expect to find that display was on a small scale immediately after such a profound change in symbolism as that around 700 BC, growing gradually over succeeding generations.

The evolution of grave markers in the seventh- and sixth-century Kerameikos was traced in some detail in Chapter 7. The main point of interest here is that the differences among the deceased were recognised by differences in the type of monumental marker, whether the tomb or the mound was the normative form – that is, they were differences within an elite group. The same situation seems to have held until the last years of the sixth century.

The late sixth-century burials are essentially similar to those of the fifth century, with considerable variety in most features, but virtually nowhere evidence for high status markers or conspicuous consumption. A very few graves had mounds or tombs in the period c.500–430 BC, but lavish energy expenditure and differentiation in markers and grave goods appears only in the turmoil of the final years of the fifth century. The mid-sixth-century lavishness is not paralleled until c.400 BC.

Conclusion

Summing up now, it has been seen that the changes through time in the distribution of status symbols in the graves are consistent with the model of exclusion. As was the case with the evidence of demography and variability, no other explanation seems to account for the data so well. These approaches strongly support the exclusion theory: in the next chapter, I will consider Camp's discussion of population trends, which might be taken as a disconfirming case, before turning in Part 3 to the social implications of the argument.

Pottery and population

In Chapters 4–8 I have developed the argument for exclusion in some detail, and several attempts have been made to falsify it. In all cases, the results were consistent with the theory, and few of the patterns in the evidence, let alone the whole structure of the material, seem explicable in other terms.

Recent discussions of the discourse of the proof in archaeology have been very sophisticated (e.g. M.H. Salmon 1982; Renfrew, Rowlands and Segraves (eds.) 1982). I would defend the case for exclusion as satisfying the seven criteria of an argument to the best explanation (McCullagh 1984, 17–33). One criterion is of course that the theory should be disconfirmed by fewer accepted beliefs than any other incompatible hypothesis about the same subject. I have suggested that in denying the direct one-to-one relationship between burials and population in the eighth century my argument is more consistent with demographic probabilities than Snodgrass', and in denying such a relationship in the seventh century it is more consistent with Archaic Greek history than Camp's. The demographic question is at once an important implication of the exclusion argument and an important test of it. In this chapter, I will review some of the archaeological evidence, and will argue that the situation is far more complex than has been assumed, and requires a more subtle approach to archaeological chronology. It will be suggested that the eighth century *was* a time of expansion, but not at the same astronomical rate at which numbers of burials grow; and that the apparent depopulation in the seventh century is an archaeological mirage.

Population explosion

It has long been felt that the eighth century was a time of demographic growth in Greece. From 750 onwards the Greeks sent out hundreds of colonies, reaching as far as the shores of the Atlantic and the Black Sea. Plato (*Laws* 740E) suggests colonisation as a cure for over-population in the ideal state, and most historians agree in seeing the new foundations as a response to population pressure at home. Athens of course founded no colonies, but may have provided colonists for other poleis' ventures.

The number of known settlements in Attica increases in the eighth century (fig. 54). However, very many of the Geometric sites are known only from the chance finds of graves; if the proportion of the population represented by the graves increased in Late Geometric, then this will partly account for the sudden increase and subsequent sudden decline in known sites. Using chance finds of burials to test the exclusion theory will only produce a circular argument. On most of the sites with Late Geometric material where there has been extensive excavation, at least some earlier and later finds have

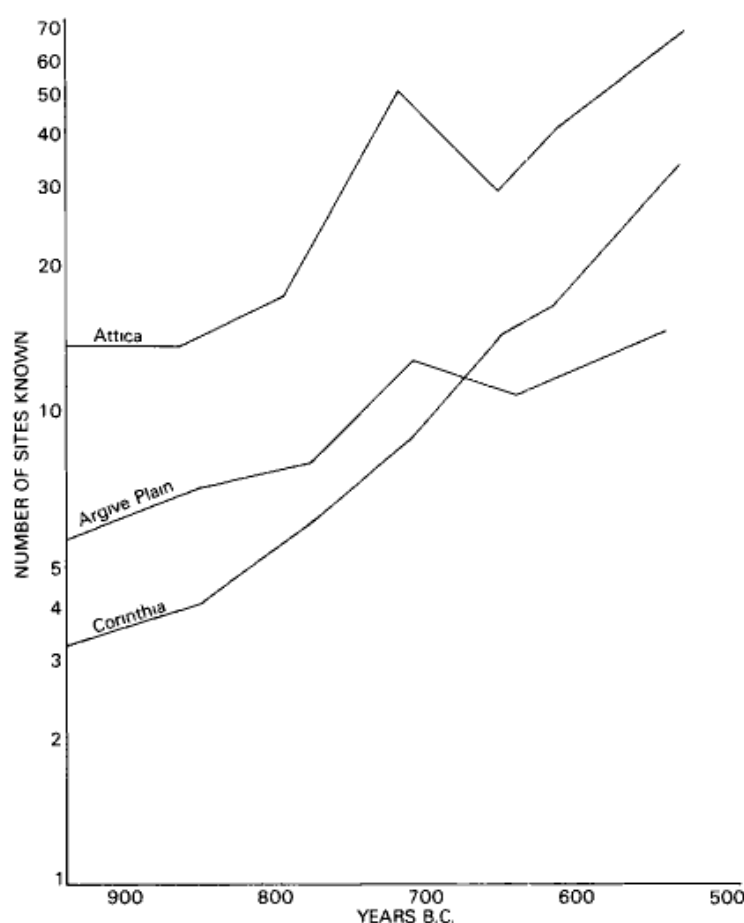


Fig.54. Numbers of sites of all types in Attica, Corinthia and the Argive plain, 900–500 BC (note that the vertical axis has a logarithmic scale)

turned up. The spatial distribution of elites may also influence the number of sites found in Attica if the exclusion theory is correct; in stratified agrarian societies, the elite tend to concentrate in the larger towns (Smith 1976b). Indeed, one of the characteristic features of peasant society is a cultural distinction between the rural world of the peasants themselves and the great tradition of an elite concentrated in cities (R. Redfield 1956). Millett points out that there were no true 'cities' for early Greek peasants to find themselves in a relationship with (1984, 90), but a clear contrast between the civilised, urbane culture of the town and the boorish countryside is still clear in Homer, Hesiod and the Archaic poets (C. Lloyd 1983, 13–22). We might expect a greater concentration of *agathoi* in Athens than in small villages; a little hamlet like seventh-century Lathouresa might have had only one 'noble' family to five or six non-noble households, and many villages may have produced no archaeologically visible burials at all. The ratio of *agathos* to *kakos* graves would then be higher at Athens than elsewhere; and when the *kakoi* appear in cemeteries in Late Geometric, we should expect a sudden wave of 'new' sites to appear.

This said, the eighth-century increase is most impressive, and I do not wish to deny that there was population growth and infilling of the landscape at this time: only that the changes in numbers of settlements do not falsify the argument for exclusion.

The obvious way to approach the question is through surface survey, which should be more independent of the burials. Table 12 shows the numbers of sites reported by some of the excellent recent surveys in Greece. Unfortunately, it is often impossible to distinguish between the pottery of different phases of the Early Iron Age with great precision, but the overall trend does strongly suggest population growth across the eighth and seventh centuries, with some regional variations. The problem of the relative visibility of pottery of different periods is a major one: Rutter (1983) suggests that Dark Age sites may be under-represented, but there is little positive evidence as yet. This will be considered further below. The surveys seem to indicate that some areas were only very lightly settled before the eighth and seventh centuries, and that this was a time of infilling of the landscape.

Table 13 shows the evidence for population growth in the tenth to fifth centuries in the Near East and Italy. A similar but less securely datable expansion of settlement took place in Iberia (Champion *et al.* 1984, 251). Greece probably fits into a large pattern affecting the whole Mediterranean and Near Eastern world in the eighth and seventh centuries BC. The argument for population growth is compelling, and I am not attempting to deny it; but this does not in itself falsify the exclusion theory. Yes, population increased in eighth-century Attica; but no, it did not increase as rapidly as the number of graves increased, nor did it fall in the way the number of graves fell after 700 BC. The possibility of depopulation in seventh-century Athens was discussed and rejected in Chapter 6, and indeed it offends against historical 'common sense'; but Camp's position must be investigated, since the purely archaeological case at first appears very strong, and might be taken as a disconfirming argument.

Drought, settlement and pottery

We must move away from the traditional model of archaeological knowledge as a Gruyère cheese with holes in it to that of a sparse suspension of information particles of varying size, not even randomly distributed in archaeological time and space. The first thing we may deduce from this revision is that many of our taxonomic entity divisions are defined by lines drawn through gaps in the evidence and zones of greatest ignorance; this does not make these taxa invalid, but it does greatly alter what constitutes meaningful manipulation and explanation of such entities. Now although these problems become less severe with later material they tend to become more subtle and they never entirely disappear.

(Clarke 1973, 19)

This passage is a good departure point for a discussion of what must be seen as one of the major problems in Iron Age Greek archaeology. Historians generally assume a rising population in Archaic Greece, and often see demography as a prime mover in the political troubles of the period. There has been some eagerness to accept Snodgrass' eighth-century population growth, but historians have generally ignored Camp's argument

Table 12. *Results of intensive surveys in Greece*

Melos	Late Geometric 16 sites; Archaic 18–21 (Cherry 1982; see also R. Catling 1984, suggesting that many of the Late Geometric sites should be down-dated to the seventh century)
Boeotia	Late Bronze Age/Dark Age 0–2; Geometric 2–6; Archaic 5–23 (Bintliff and Snodgrass 1985)
Southern Argolid	Protogeometric 0; Late Geometric 20; Archaic 21 (C.N. Runnels, pers. comm., 1984)
Nemea*	Early Iron Age 3; Archaic 8
Laconia*	Geometric 1; Archaic 9
Mesara plain*	Geometric 2; Archaic 6
For the sake of comparison, extensive surveys have produced broadly similar results:	
Messenia	Submycenaean 4–9; Protogeometric 11–13; Geometric 14–19; Archaic 34–42 (McDonald and Rapp (eds.) 1972)
E. Phokis	Protogeometric 3–4; Geometric 8–9; Archaic 11–24 (Fossey 1986)

*Based on reports given at the Cambridge survey conference, May 1985.

Note that no two surveys use exactly the same chronological divisions.

Table 13. *Population growth in Italy and the Near East in the eighth to fourth centuries BC*

Southern Etruria (Potter 1979)		
<i>Period</i>	<i>Sites</i>	
1000–700 BC	79	
700–500 BC	314	
500–300 BC	345	
Central Euphrates floodplain (R. McC.Adams 1981)		
<i>Period</i>	<i>Sites</i>	<i>Occupied area*</i>
Middle Babylonian (c.1200–750 BC)	134	616 ha.
Neo-Babylonian/Achaemenid (c.750–330 BC)	257	1779 ha.
Lower Diyala (R. McC.Adams 1981)		
<i>Period</i>	<i>Sites</i>	<i>Occupied area*</i>
Middle Babylonian	34	73 ha.
Neo-Babylonian/Achaemenid	81	197 ha.

*Site areas based on mid-points of size categories: see R. McC.Adams (1981, 142) for the method.

(1979) for seventh-century decline. Archaeologists, on the other hand, have welcomed it, and it has been extended from Attica to many other areas, even reaching Epirus (Vokotopoulou 1982, 97–8). Camp has drawn attention to a very important pattern, but his interpretation of it is questionable. The problem is very much one of drawing lines through the zones of the greatest archaeological ignorance, and a more sensitive

approach to the data is necessary. I will first set out what I see as the main problems in Camp's original paper, and will then go on to argue that the patterning – which is far more complex than Camp suggested – results from a combination of factors of bias in deposition and recovery, and that we are looking at the seventh century from a bad angle. I cannot pretend to have found answers to all the questions which are raised, but I hope that this study at least clarifies the crux of the problem.

Camp's drought

Camp first suggested a drought in his doctoral thesis on the water supplies of Athens. He noted that many wells in the Agora were closed around 700 BC, and that immediately after this the number of graves fell. Some of the late eighth-century wells were much deeper than average, and he concluded that a terrible drought set in just before 700, causing the water table to fall. He also suggested that this led to the abandonment of Lefkandi and Zagora, and the beginnings of colonisation.

The core of the theory is the closure of the wells. Sixteen were closed in Late Geometric II, he tells us, and only six can be shown to have been in use in the first half of the seventh century. Wells P7:3 and Q8:9 were over 11 metres deep, more than twice the norm. However, there are problems. Coldstream (1968, 46) dated the dumped fill in P7:3 to Late Geometric Ia – that is, c.760/750 BC, rather than 700. Further, the neighbouring wells P7:2 and R8:2, both closed between 650 and 625 BC, are 7 and 10.8 metres deep respectively (Brann 1962, 130). Unless we assume that the drought lasted over a century, we must conclude that the unusual depth of these four wells is due to local geological features in this part of the site.

Camp's assertion that the ratio of users to wells remained constant is questionable, and there is certainly no simple relationship between population and the closure of wells. At Corinth, for example, of the thirty-six wells dated between 900 and 500 BC, eleven seem to have been closed in either Late Geometric or Early Protocorinthian, and yet the population continued to grow. The construction of the Peirene spring house around 700 BC may be connected with this. We cannot know the particular details behind changes in water supplies at any one time. At Athens, Snodgrass' argument that the Agora changed functions (1983) may have much to do with the changes.

By far the most serious objection to Camp's drought is the weakness of the literary sources he musters. This catastrophic event seems to have passed almost totally unremembered. Camp cites a scholiast on Aristophanes' comedy *Lysistrata* and two comments in the tenth-century AD lexicon *Suda* as sources for a tale that the cult of Artemis at Brauron was established after Artemis sent a terrible drought to Athens. In addition to the feebleness of the sources, there is the problem that the earliest votives from the cistern deposit at the temple of Artemis are late tenth-century BC, rather than eighth-century (Themelis 1971, 47). The story of a drought on Thera connected with the foundation of Cyrene refers to a date around 630 BC (Herodotus 6.153–156), and the Archilochus fragment 'Zeus sent them a terrible drought' (West 1971, fr. 230) cannot be much earlier than the mid-seventh century. On the other hand, Strabo's story of famine prompting the Chalcidian settlers to go to Rhegion via Zancle (6.1.6) deals with an episode of about 725 BC, and Plutarch's tale of drought at Tenea in Corinthia

(*Moralia* 773A–B) should describe a situation in the 730s. This is a very poor showing, of scraps of evidence scattered across a whole century, and generally drawn from very late sources. To make things worse, the cemeteries at Thera and Paros (if these can be admitted as evidence) grew steadily throughout the seventh century. If large parts of the populations of Attica, the Argolid and the Cyclades had been wiped out in the early seventh century we would expect it to have made rather more of an impression than this.

Rejecting the drought theory as it was originally framed is not the end of the matter, however. The seventh-century archaeological record is very complex, and far more subtle than this.

Inter-regional patterns

Camp failed to take advantage of all the evidence available, some of which gives the appearance of confirming the depopulation theory. The number of settlements known in Attica falls suddenly in the early seventh century, recovering only in the sixth. The same thing happens in the Argive plain.

Even more importantly, the evidence for seventh-century occupation at some of the major settlements is very scanty. This is distinctly worrying, since the most widely accepted explanation of the decline in numbers of Archaic settlements is synoikism, and the movement of population into the larger centres.

Simplifying somewhat, two regional patterns can be seen in the Aegean. In some areas there is decline in the settlement evidence, and in others no decline. The best known region of the second type is Corinthia. At Corinth itself, the settled area grew rapidly in the late eighth and seventh centuries. New areas were terraced for houses, and seventh-century settlement spread up the Lechaion road. The number of sites in Corinthia as a whole increases from the ninth to the sixth centuries without a break.

Some other areas, not so well explored as Corinthia, seem to follow much the same pattern. On Thera, burials increase rapidly from c.770 to the sixth century; and at Smyrna, the settlement continued to grow until the Alyattan sack in the early sixth century. On Crete, while many hill sites were abandoned around 700 BC, Knossos and several other settlements were clearly well populated, and seem to have flourished until late in the seventh century. The settlement of Paros is perhaps somewhere between the two types; during the seventh century there was a gradual shift away from the Dark Age hill sites, and by 600 most of the small sites in the Naoussa area seem to have been abandoned.

Some of the surface surveys noted earlier suggest a degree of stagnation in population growth in Archaic times, but certainly not the dramatic slump noted in Attica. If drought and famine really were responsible for the fall in settlement evidence, then this regional pattern is surely inexplicable. It hardly seems reasonable to argue that Corinth, Halieis and Melos were oases of prosperity in the seventh century, while all around them was a literal desert of thirst and hunger. Apart from the improbability of repeated droughts striking down only selected areas, there is plenty of evidence that the exchange of bulk commodities between micro-climatic areas was already well established before the eighth century BC. Raw materials are moved over long distances in Homer (e.g.

Iliad 7.467; *Odyssey* 1.184), and Hesiod considered seaborne trading a fairly unremarkable way for getting out of 'debt and joyless hunger' (*Works and Days* 646–67). In another passage he advised Perses not to put all his 'gift of the earth' into a hollow ship (*Works and Days* 689); we might infer that exchange of staples was fairly widespread. This was one of the options available in the early seventh century for evening out the short-term variations in crop yields to which the Aegean is particularly prone (see Halstead 1981; Garnsey and Morris, forthcoming); any famine overriding all the coping mechanisms found in Homer and Hesiod must have been very prolonged, and cannot have produced the pattern that we find. Camp feels that some areas may have a more 'healthy' seventh-century appearance because they escaped the consequences of the drought by taking part in colonisation (pers. comm. 1984), while states like Athens and Argos, which did not, were decimated, and did not recover until the sixth century. No explanation is offered for why some states chose not to organise colonies and stayed at home to be wiped out; nor why communities which were presumably reduced to a population level below that of the new lower carrying capacity by means of their own choice and the flight of excess population should have recovered any more rapidly than those whose population had been culled by more catastrophic Malthusian checks.

That there should be two such different patterns – or perhaps a continuum of different patterns with Attica near one end and Corinthia near the other – is most surprising, and quite impossible to explain with the drought theory. Arguments that disease spread more quickly at Athens and Argos because they were more 'urbanised' are nonsense; in so far as 'urbanism' applies to the eighth century at all, it is clear that Corinth and Knossos were just as developed as any other settlements in the Aegean. The answer, I will argue, lies in the very different local material cultures of seventh-century Greece.

Pottery and settlement

The visibility of sites to survey and excavation depends on many features, but one key area is the proportion of vases in the pottery assemblage which are close to the modal type (see fig. 4 above). This is potentially quantifiable, although very little Iron Age pottery has been published in sufficient detail.

One of the assumptions I make here is that sites of the whole period 1200–500 BC will be equally vulnerable to post-depositional change through the agencies of erosion, destruction, burial under later deposits, etc. The problem of the 'progressive disappearance' of early sites (Bintliff 1985; Bintliff and Snodgrass 1985, 137–8) is unlikely to have major effects in this relatively short period. This being so, the important variable in establishing the relative visibility of a phase is the composition of the assemblage *at the time of deposition*. For this purpose, the only deposits of interest are sealed groups – relative visibility should be tested on the contents of intact floor deposits, rubbish dumps, sanctuary discards, grave groups, and so on, and not necessarily on the whole mass of pottery belonging to any one period, or even random samples chosen from it.

The only relatively fully published material comes from Asine, in the Protogeometric levels (B. Wells 1983). The Geometric deposits east of the acropolis are unpublished, but

a Late Geometric house group from the Barbouna area has been described (Hägg 1978). It may be rather unusual, in that a large proportion of the vases were closed shapes; amphorae were particularly numerous. It is likely that this was a storeroom, and so not completely representative. However, it is very striking that almost every vase in the deposit was decorated in a very typical Late Geometric style.

In the seventh century there is no good evidence, but at least in the Cyclades it seems that the bulk of the everyday wares were very similar to those used in Late Geometric. To be sure, there were very distinctive Orientalising wares, but these occur rarely in settlement sites. In 1983–4, areas of seventh-century housing excavated at Koukounaries included large deposits of banded and plain pottery, to all appearances Late Geometric, securely stratified *above* Archaic incised-and-stamped pithos fragments (Schilardi, forthcoming). Clarke's models of subassemblages, described in Chapter 1, might well be appropriate here, and the implications are clear: when such deposits are disturbed by later activity or are only sampled in very small trenches, seventh-century activity can all but disappear against Late Geometric backgrounds. Anyone who has dug on a sub-Roman site in Britain will be aware of the devastating effect residual pottery can have on the interpretation of the stratigraphic record.

At Athens, seventh-century settlement evidence has often proved elusive. There may well have been less 'diagnostic' material about than in the eighth century. Only a few Protoattic artists can be identified, and there may as a result have been very little fine painted ware in circulation. Fine ware is still found in huge amounts in ritual contexts, like the sanctuaries on Mt Hymettos, the Acropolis and the Agora oval building, but is very rare in the Agora wells or the seventh-century house. Perhaps at Athens, there was more coarse ware in use in domestic contexts after 700, or the everyday wares did not change much from Geometric, as I suggested for Koukounaries. As a contrast, in Corinthia, where dozens of seventh-century painters and their workshops have been identified, a larger number of seventh-century sites is known. This is of course not the only way to approach the question, since these hands were doubtless not the only craftsmen active, but it is certainly very suggestive.

Seventh-century houses excavated at Corinth and Perachora contain quite a high proportion of diagnostic wares; and Williams has suggested that the buildings in the 'Potters' Quarter', formerly identified as workshops because of the vast amounts of seventh-century pottery found there, were in fact domestic residences (1982, 17–18). At Argos, excavation in the Agora has found seventh-century settlement layers, and buildings which must date to the Early Archaic period, but the amount of diagnostic material recovered is very small, and the presence of seventh-century child burials remains one of the strongest dating criteria.

In Attica, very little settlement evidence is published. At Thorikos, the main seventh-century settlement probably lay under the Classical industrial quarter (see fig. 20a). The only published remains are from the Tower Compound in Insula 3, where the Archaic layers were all but destroyed in Classical times. Two seventh-century vases, two early sixth-, and a great deal of late sixth-century pottery have been published. This may reflect the low visibility of the seventh-century layers; like those at Athens, they all but disappear when disturbed. The only intact excavated settlement from Attica is

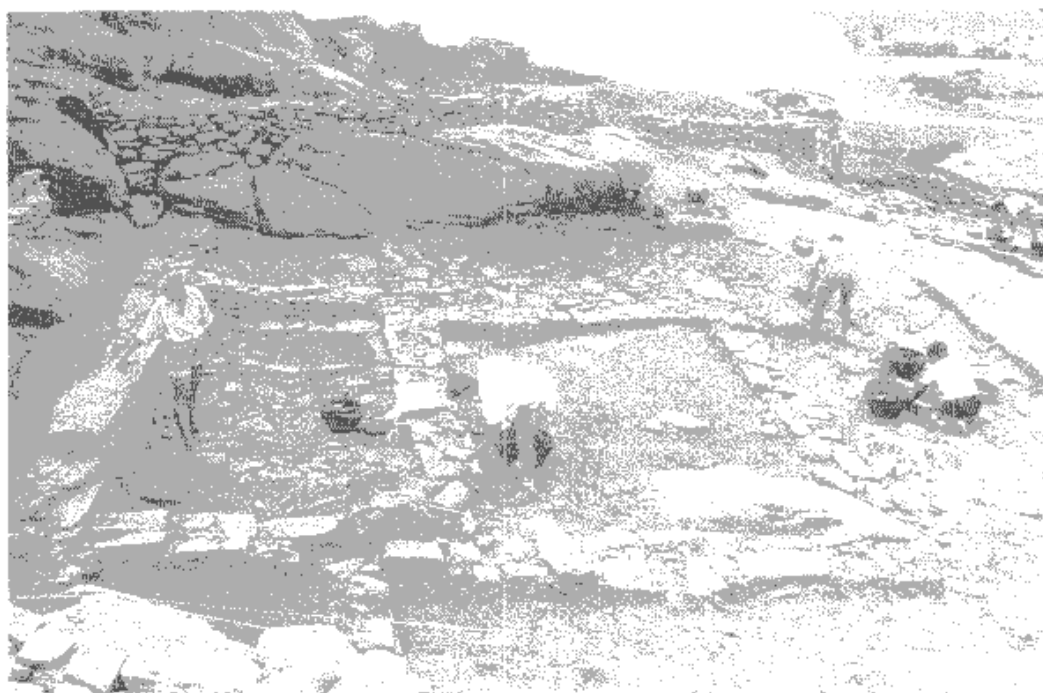


Fig.55. Eighth/seventh-century house J13 at Koukounaries on Paros during the 1985 excavation season (photograph D. Connelly)

Lathouresa. The original excavation was never published, but Lauter (1985a, 50) makes the unusual claim that there was virtually no coarse ware from the site. The pottery he publishes from structure VIII, a cult feature, is votive and very diagnostic, but the nature of the domestic wares remains unclear.

Elsewhere, the situation varies. Unfortunately, the pottery from the houses at Emborio on Chios (Boardman 1967) was never properly published, but it is apparent that seventh-century layers at Smyrna, Vroulia on Rhodes and Grotta on Naxos were all very distinctive, characterised by pottery close to the diagnostic fine wares – Bird Bowls, imitation Corinthian, etc. Rubensohn's dig at Paroikia found great quantities of Late Geometric pottery, but he published very little from the seventh century (1917, 73–88). While some of the population from the sites around the Bay of Naoussa may have been involved in the colonisation of Thasos, the abandonment of these areas during the seventh century, although a more gradual affair than had previously been thought, should surely have led to a greater concentration of people in the main town at Paroikia. Numbers of graves certainly increase there after 700, if that can be taken to mean much; and a low visibility seventh-century domestic pottery would explain all the problems here at one sweep.

It seems that chance finds of seventh-century settlement material may be more likely in some parts of the Aegean than others. While this need not necessarily be such a problem in intensive surface survey, regions like Attica, the Argive plain and the Cyclades, known generally only from very extensive reconnaissance and chance discoveries, can

suffer when compared to areas where seventh-century settlement pottery may have been more visible, as in Corinthia.

Before leaving the question, I would like to look at one area where the disjunction created by the traditional chronological methods is particularly painful from a historical point of view. Camp originally referred to Euboea only in a passing reference to the abandonment of Lefkandi; but since he wrote, it has been argued that Eretria too was totally abandoned soon after 700.

Eighth-century Eretria was a very large settlement. The earliest evidence comes from a handful of mid-ninth-century graves, and sanctuary and house remains begin by 800 BC. By the late eighth century, Eretria occupied an area of at least fifty hectares. Numerous houses have been excavated, and an early seventh-century fortification wall enclosing the northern part of the town has been picked up in three places. But after 675 BC, it seems that all settlement evidence abruptly stops. No structure dated between 675 and 550 BC has been identified in the areas used for domestic habitation. A few seventh-century child graves have been found, mainly in the West Cemetery, and cult activity at a number of spots (including an impressive sanctuary of Apollo), but never housing or other settlement deposits.

This is very surprising. One of the Swiss excavators of Eretria has suggested that the settlement became more concentrated in the seventh century, clustering inside the fortification area (C. Krause 1982); however, the Greek excavations inside the area he suggested for the seventh-century nucleus have again produced virtually nothing to fill the gap between Late Geometric and Black Figure.

The almost total abandonment of the site is difficult to accept. The literary sources are not very good, but do not sit well with this view. Contemporary references to Euboea, generally taken to refer to the Lelantine plain, in Archilochus (West 1971, fr. 3) and the Homeric Hymns (*Delian Apollo* 31; *Pythian Apollo* 219) do not evoke a ghost town. Herodotus (6.127) tells us that Eretria was at the height of her power at the time of the wedding of Agariste of Sicyon around 575 BC. Certainly this is all rather poor stuff, which should perhaps not be allowed to override the argument from the silence of the archaeological record. After all, we do not know what Archilochus' poem was supposed to be about; Plutarch's comments with it on the length of the Abantes' hair are hardly very helpful (*Life of Theseus* 5). The Homeric Hymns of course aim to describe a semi-unreal past, and Herodotus was writing a full 125 years after Agariste. The whole wedding competition episode may be no more than a folk-tale motif.

So perhaps we would do best to disregard the literary evidence. Themelis has argued that the abandonment resulted from the Lelantine war (1979, 49–50; he subsequently espoused Camp's drought (1982, 57)). This is generally dated around 700 BC, and is thought to have grown from a struggle between Eretria and Chalcis into a full-scale panhellenic war, even though the scanty literary tradition does not support the elaborate web of hypotheses woven around it, and there is even some question over the best reading of the crucial text of Thucydides (1.15.3; see Lambert 1982).

The same explanation – defeat in the Lelantine war – was advanced thirty years ago for the absence of surface pottery datable to 700–550 BC at Chalcis (Boardman 1957, 27–9). Excavation since then has also failed to produce much material (see

Andreiomenou 1976a, 145). Is it conceivable that *both* the main combatants in the war, along with Lefkandi which lay between them, should have been depopulated? The war is normally seen as a dispute over land under population pressure; a classic case of a war of circumscription (Carneiro 1970). As such, it is surprising to find one, let alone both, the combatants giving up their homes immediately afterwards, and such a result seems totally alien to the nature of Greek city-state warfare (see Vernant 1980, 19–44).

There certainly was some movement of Euboean population around this time, although it hardly seems enough to account for the archaeological record. The earliest Greek colony, Pithecusae on Ischia, was a joint Eretrian/Chalcidian foundation, probably dating near 750 BC. The area occupied was about 75 hectares, and Ridgway suggests that the population was 4,000–5,000 by 700 BC (1984, 64). If we allow them to have doubled in a generation through natural increase, we are still speaking of over 1,000 Euboeans as colonists (or at least 500 men, if they took native wives).

Pithecusae was only one of nineteen Euboean colonies, some of them being very large. Even before much of the archaeological evidence was available, Dunbabin wrote 'the total number of settlers of the Khalkidian colonies must have been a high proportion of the population of Khalkis at the time' (1948, 10). Only the Milesians can compare with Chalcis for colonising fervour, and the wave of colonies must represent a radical change in the settlement pattern of Euboea in the eighth century. But nearly all the colonies are credited as Chalcidian, and are dated by the ancient sources rather earlier than 675 BC, when the Eretrian settlement material seems to stop. Of course, Chalcidian colonies could have included Eretrians, and colonies founded in the 720s could have continued to receive a steady flow of settlers into the seventh century. But to suppose that emigration, whether caused by drought, war or whatever, led to the almost complete abandonment of the Lelantine plain in the seventh century is surely going too far, and failures in retrieval and/or recognition strain our credibility less. The subsidiary motifs of the group A and B seventh-century burial amphorae in the West Cemetery (Boardman 1952, 17–19) are very like the main field decoration on many of the smaller late sixth-century vases found in the West Gate deposits (see Bérard 1970, pl.15.69; Andreiomenou 1977a, pl.53b; Descœudres 1976, 46, 48 with n.200, 56, figs.9 and 10, and pl.7 (FK 713.1, FK 089.3); Metzger 1985, 11 and pls.4–8). Protocorinthian and imitation Ripe Corinthian have been found in 'Late Geometric' levels in O.T. 740 (Mylonas (ed.) 1984, 57). Themelis suggests that a down-dating of the end of 'Geometric' at Eretria is quite possible (pers. comm. 1984), and many of the buildings placed in the late eighth or early seventh centuries may in fact be much later.

Until attention is directed towards these problems by excavators, and full and detailed study of the stratigraphic sequences is undertaken, progress is impossible. Something of a shift in paradigms is called for. The value of Clarke's model of pottery subassemblages is apparent, and many of the accepted truths about the pottery sequences in settlements may prove to have been built on shifting sands. John Camp has taken the traditional definitions and taxonomic entities, and quite rightly pointed out the implications of following them. But Gruyère cheese can on its own make a rather unpalatable meal, and in this case it is too much to swallow. There may be serious errors in this interpretation of the settlement pottery, but in the present state of knowledge it is

impossible to be more precise. Nevertheless, in the circumstances I feel that this is a better approach than the traditional focus on the finest wares. The visibility of seventh-century sites is an empirical problem which can only be solved by the detailed study of stratified sequences at the site level.

It might be objected that I am insulating the theory of exclusion from burial from being tested with these arguments, but this is not a valid criticism. I have suggested that settlement and ritual pottery may develop and be used in different ways. The pottery used in Attic graves seems to have been tightly modal, and there is unlikely to be any serious problem with the Attic burial chronology, although elsewhere matters may not be so simple – on Rhodes, for example, local imitation Protocorinthian wares were still used in graves down to 550 BC (Archontidou-Argyri 1983); and on Thera, Subgeometric urns contain Attic Black Figure pottery of the mid-sixth century (Zapheiropoulos 1981). The depopulation thesis does not falsify my argument, since it can be seen that the ‘demographic decline’ in the settlement evidence is based on incautious manipulation of the over-rigid classifications discussed in Chapter 1. That such apparently strong evidence for population changes might be misleading should give archaeologists food for thought; but that is another matter.

The rise of the polis

Introduction

Now we return to the rise of the polis. In analysing a major social phenomenon, we are of course going to want to look beyond the borders of a single region, and I will argue here that the transformation of the social structures in the mid-eighth century was part of a widespread shift in ideas of the community which can be seen in many parts of Greece, and indeed has its roots in a Mediterranean-wide process of state formation. The consequences can also be seen in new ideas of the gods, the past and the organisation of space. I will then argue that the Athenians diverged from the general line of development in the seventh century BC, and re-instituted a non-polis state form, before citizenship was reasserted as the basis of the community at the end of the sixth century. The data from outside Attica are often rather poor, but it is only in a wider perspective that we can understand which processes are peculiarly Athenian, and which belong to the bigger picture.

I am centrally concerned with the changing relationships between the groups I have been calling the *agathoi* and the *kakoi*. I shall propose that these groups of people can best be analysed as classes, at least in the eighth century. Any relationships between classes can be understood only as a process, unfolding through time. They are not static 'structures' or 'categories', and there can be no such thing as 'class' without the notion of historical relationship:

Like any other relationship, it is a fluency which evades analysis if we attempt to stop it dead at any given moment and anatomize its structure. The finest-meshed sociological net cannot give us a pure specimen of class, any more than it can give us one of deference or of love. The relationship must always be embodied in real people and in a real context . . . I am convinced that we cannot understand class unless we see it as a social and cultural formation, arising from processes which can only be studied as they work themselves out over a considerable historical period.

(E.P. Thompson 1980 [1963], 8–11)

The rise of the polis is the historical process whereby groups of people entered into the specific relations of citizenship.

I will trace the eventuation of this process by breaking it down into three sections. The first, c.1125–1050 BC, is no more than a sketch of the post-palatial world. This very important period can be understood only from the perspective of the Late Helladic material, which is beyond the scope of this book. Consequently, Submycenaean will be

used largely as a backdrop, allowing us to see the change around 1050 BC as a dynamic process. This established the pattern of relationships for most of the Dark Age. This pattern is traced through time and space in the second section; and the crucial developments of the mid-eighth century mark the beginning of the third section. This treats the whole period down to 500 BC. Although I am arguing that there were two further major structural changes at Athens, in a panhellenic context these two and a half centuries should be treated as a single process. The study ends on the eve of the Persian wars, as a new stage of Greek society begins.

The end of the Bronze Age: c.1125–1050 BC

Submycenaean begins with a major break with Late Helladic practices, the replacement of multiple by single burial, and this has naturally dominated archaeologists' interests. However, the isolation of this particular symbol and attempts to attach meaning to the opposition of the group and the individual in the twelfth century BC have probably been a retarding influence. More research must be done on Late Helladic III burial before the significance of Submycenaean can be understood; even such a fundamental question as the membership of the social group using chamber tombs is unanswered.

Krause has suggested an ideology of denial in Submycenaean (G. Krause 1975, 18–19). As was seen above, this was perhaps the case in the Kerameikos in Zeitstufe 1, but then broke down quite rapidly, with a wider range of personae appearing, and an escalating consumption of wealth. Unfortunately, chronological control outside the Kerameikos is generally not good enough to separate Submycenaean stages with any confidence.

It seems reasonable to suggest that in the generations after 1200, the social structure will have undergone profound transformations. The Mycenaean world faded away rather than immediately disappeared after the destructions, and the twelfth and eleventh centuries saw the devolution of power from the centralised palace systems. By this process the Mycenaean potentate vanished, and the *pa₂-si-re-u*, a relatively minor figure in the Linear B tablets, may have evolved into the Dark Age *basileus* (Andreev 1979; Drews 1983, 109–15). The decline of the palatial system was not uniform. Pylos was abandoned at the end of Late Helladic IIIB; the palaces at Mycenae and Tiryns were perhaps occupied well into IIIC. No destruction is known from Athens, and Mycenaean culture continued well into the twelfth century at 'refugee' sites such as Koukounaries. The twelfth and eleventh centuries will have been times of major readjustments, and perhaps of competing ideologies. At Argos, for example, some of the Late Helladic chamber tombs on Deiras continued in use, and new ones were dug, even after the main wave of single burial had begun (Hägg 1974, 42).

The settlement pattern changed radically in the twelfth and eleventh centuries: generally, there was a shift away from the old centres of Mycenaean occupation towards less populous areas like Achaea and the Ionian islands. There were also changes in cult practices, with the abandonment of the shrines at Phylakopi, Mycenae, Asine, Tiryns and Kea, although there was some continuity on Crete.

Similarly, there was much continuity in burial practices on Crete, but great change elsewhere. The few graves known from Argos, Asine and Tiryns are mostly single inhumations, often dug into the remains of Late Helladic houses, contrasting strongly

with Mycenaean symbolism. There have been some attempts to identify a 'substratum' of cist burial in Late Helladic Greece, continuing Middle Bronze Age practices. The argument is generally framed in opposition to those who wish to associate cist burial with northern invaders, but the custom was not widely followed. The question of migration does not have any significant bearing on the question here. Invasionists might take heart from the discovery in December 1984 of a twelfth-century tumulus containing inurned cremations at Chania near Mycenae, placed by the razed ruins of a Late Helladic settlement (H. Catling 1985a, 21), but the ethnicity of the buriers is not the only, or even the most interesting, question for the Early Iron Age. The contrast with Mycenaean practices is itself of potentially greater significance.

The main problem is still lack of evidence. Even at Lefkandi, only the Skoubris cemetery dates to Submycenaean. Of the twenty-one graves certainly of this period, perhaps as many as sixteen are sub-adults, going on grave size and the diameter of the bronze rings in the burials. It is difficult to establish anything about the community from such a sample (see Popham, Sackett and Themelis 1980, 355–6).

We might suggest that by 1125, in Attica at least, a new world view had appeared, where ritual concentrated on denying the existence of differences in wealth and power. Whether there were such differences is another matter. In its historical context, such an ideology seems likely to have been defined primarily in terms of its break with the Mycenaean world, which no longer provided a viable system. However, the new ideology was not successful, and perhaps already by 1100 competition was on the increase, and the system behind the Submycenaean funerary record began to decay. The causes of this are unobservable, but we might surmise a period of rapid changes and unstable ideologies in the shadows of the vanished glories of the palaces.

This reading of the Submycenaean evidence is of course weakly supported, and I would repeat that it is most valuable as a backdrop against which to view the dynamic processes of change around 1050 BC. It is to these that we now turn.

The Dark Age: c.1050–750 BC

Serfs, peasants and slaves

I argued in Chapter 5 that there was a major change around 1050 BC, as adult formal cemeteries began to be reserved for *agathoi* only. The obvious implication of this is that Dark Age society is to be seen as stratified, with great emphasis on a rank distinction within the adult group. There is nothing in the archaeological record itself which can tell us much about the relationship between the *agathoi* and the *kakoi* other than that a gulf existed between them in some form for three centuries, and began to be far less strongly stressed in ritual around 750. We need an interpretative framework, which must inevitably come from outside the archaeological remains themselves.

The best approach is what historians call the regressive technique, working backwards from better-known periods. Classical Attica, where the citizen polis reached its zenith, was a 'slave society'. We should draw a distinction between slave-owning societies, which are common enough, and those few societies where chattel-slavery was institutionalised as a, or even the, major form of surplus-producing labour. Sheer num-

bers of slaves are important: some historians would set a line where slaves represent more than 20% of the total resident population. Large-scale slave systems, in which the social structure was decisively dependent on the institution of slavery, have been very rare in world history (O. Patterson 1982, appendix C). However, numbers are only part of the argument: the location of slavery – where the slaves worked, and who for – is every bit as important in defining true slave societies. In Classical Athens and Roman Italy, slave labour was omnipresent, and provided wealth not only for a governing elite but also for a large group within the citizenry (Finley 1968a; 1980, 67–92; 1981b, 97–115; 1985a, 62–94).

Some definitions are called for. Watson (1980, 8–9) suggests a tripartite classification of the slave, as human property, a forced labourer, and a kinless outsider within the community. However, this may be too crude. Recent work has emphasised that slavery is a process, in which the slave only begins as an unambiguous commodity, and is gradually incorporated into the host society (O. Patterson 1982; Kopytoff 1982; 1986). Since ‘ownership’ and ‘property’ are themselves culture-specific concepts, Orlando Patterson’s definition has several advantages: ‘slavery is the permanent, violent domination of natally alienated and generally dishonored persons’ (1982, 13).

This model has been very useful for the study of African slavery, but in the case of the ancient Greek *doulos*, the process of incorporation was arrested at a very early stage. The slave was always ‘owned’, and remained a liminal figure. Even on emancipation, Greek slaves were denied entry to the citizen body: they moved from being property to being complete outsiders. The *doulos* can be sharply distinguished from other forms of dependent labour (such as the Spartan helot) which were not natally alienated, and were not subject to such extreme reconversions to the commodity status.

A certain degree of commoditisation of the labourer is common enough in agrarian societies, but the slave systems of Greece, based on this extreme version of what Watson (1980) calls ‘closed slavery’, are unparalleled. One of the major questions for the ancient historian is where the slave societies came from. In a brilliant argument, Finley pinpointed three necessary conditions for the emergence of a slave society:

The first, in a world which was overwhelmingly agrarian, is private ownership of land, with sufficient concentration in some hands to need extra-familial labour for the permanent work-force. The second is a sufficient development of commodity production and markets. . . . The third is a negative condition, the unavailability of an internal labour supply, compelling the employers of labour to turn to outsiders.
(Finley 1980, 86)

Finley stresses that these are not sufficient conditions which ‘cause’ slave society to emerge (1982, 205); but all three had to be satisfied in Attica and some other parts of Greece before the Classical period. Traditional societies not based on slavery rely on the exploitation of peasantry through tax and/or rent (whether or not the surplus labour thus extracted is viewed emically as exploitation). Even in Classical Athens and Rome, most of the labourers were peasants; but the vital difference between the traditional and the ‘slave mode of production’ is that in the latter, the elite – and many of the peasants

themselves – produce a surplus through slave labour as well as or instead of through the peasants' own labour. In both Greece and Rome, the third, negative condition for the emergence of a slave economy was the inability of the elite to extract sufficient surplus production from the peasants. In both societies, the peasants were citizens, and citizenship was inextricably bound up with ownership of the land and religion. Finley holds that citizenship was established in Archaic times through struggle from below.

The peasantry had won their personal freedom and their tenure on the land through struggle, in which they also won citizenship, membership in the community, the *polis*. This in itself was something radically new in the world, and it led in turn to the second remarkable innovation, a slave society. (Finley 1980, 89–90)

This integration, the origin of the polis ideal, I identify with the coming together of the *agathoi* and *kakoi* in the mid-eighth century. The dependent *kakoi* of 1050–750 became the citizens of Late Geometric times.

This reconstruction of the *agathos/kakos* relationship can be fleshed out a little more. Finley assiduously avoids using the word 'serf' for the dependent peasants of pre-political Greece, feeling that it has too many overtones of medieval feudalism, and only confuses the situation (Finley 1985a, 65, 184–5; also Lotze 1959, 64–8). However, I think serfdom does sum up the relationship well. Ste Croix points out that there is a United Nations definition of serfdom, agreed in 1956, which avoids the exotic feudalisms which have irritated historians since Marc Bloch. Serfdom is

the tenure of land whereby the tenant is by law, custom or agreement bound to live and labour on land belonging to another person and render some determinate services to such other person, whether for reward or not, and is not free to change his status. (quoted from Ste Croix 1981, 135)

This is a very high-level generalisation, but it encompasses a second element of the *agathoi/kakoi* relationship: land tenure. I discussed Saxe's and Goldstein's hypotheses of the links between resources, descent groups and formal cemeteries in Chapter 3, and suggested that the model is quite appropriate for Archaic Greece. The exclusion of the *kakoi* from formal cemeteries might then be a justification for seeing their relationship with the *agathoi* as one of serfdom. Of course, this relationship is to be thought of as *structural*, in the sense outlined in Chapter 2. We should probably envisage the *kakoi* of the Dark Age enjoying the usufruct of the land, while the *agathoi* may at one level of analysis have 'owned' it, in theory having some right to turn a household of *kakoi* off their plot, but probably rarely (if ever) doing so in practice. This situation, of 'overlapping stewardship', with ownership at different levels and in different senses, is very common in the ethnographic and historical records, among stratified societies (e.g. Marc Bloch 1962, 115–16; Kuper 1947, 44–9). The meanings of the *agathos/kakos* distinction in everyday life may have been very different from what we read into the social structure expressed in and partly created by funerary practices.

Some ancient historians see land as totally inalienable in pre-Classical Attica, with each family holding its plot in perpetuity. The argument stems largely from Plutarch (*Life of Solon* 21.3) and the Athenians' own ideology, but it is bolstered up by false ideas about the rigidity of 'primitive society'. The whole position is best simply ignored (see the excellent remarks in Finley 1968b; Gallant 1982, 112–13).

Landsberger (1974) proposes a useful framework for studying changes in peasant society. Rather than using rigid categories such as 'peasant'/'non-peasant', he suggests that we try to place different groups within society relative to one another along three principal axes. He defines these as: (a) control over economic and political 'inputs' – i.e. land, capital, labour, votes, patronage, etc.; (b) control over the economic and political 'transformation processes' – decisions about what to grow, access to knowledge and power, and influence in policy making; (c) control over economic and political 'outputs' – i.e. control of agricultural products and access to political 'products' like law, ritual, etc.

In each case, access and control should be considered in terms of the amount and security of control exercised. Landsberger also suggests that the cultural elements of the definitions of peasantry offered by Kroeber, Redfield and others flow directly from the peasants' low positions on these economic and political scales.

This is simply a model to help us understand our data: in a real situation 'scores' cannot be established for social groups, and in any case the three axes are not so easily separable. And of course, even if such a quantification were in principle possible, there would be no empirical basis for it in eighth-century Greece. Most importantly, Landsberger's framework refers to the organisational features of the lord-peasant relationship, while the burial evidence is necessarily restricted to its ideal, structural side. Figure 56 therefore shows the *conceptual* shift in the relationships in the eighth century, which is to be associated with the appearance of citizenship as the ideal form of

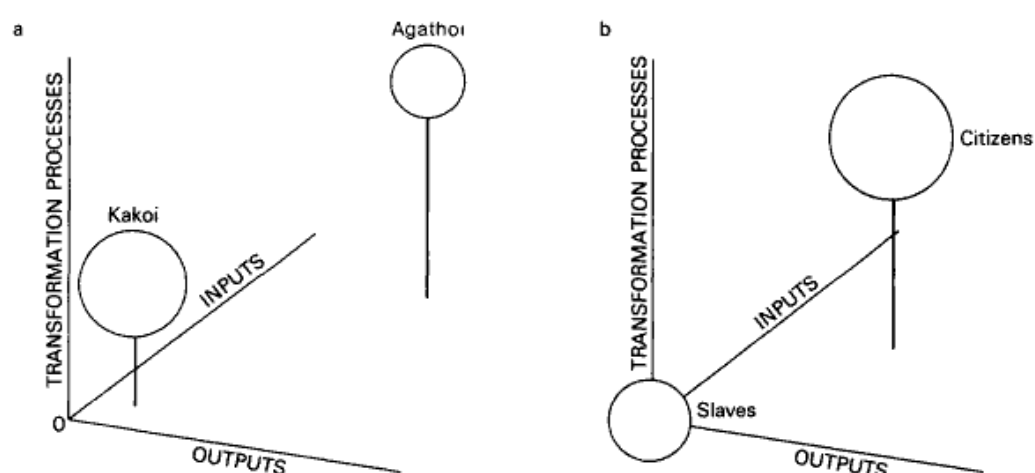


Fig. 56. Schematic representation of the transition from (a) the pre-polis social structure to (b) the polis structure

relationship within the groups formerly separated as *agathoi* and *kakoi*. Ultimately, the consequences of this shift for the economy of a complex agrarian society provided the negative condition for the rise of the 'slave mode of production' (fig. 56b). The slaves, of course, score close to zero on all three scales.

Returning to Finley's view of the emergence of slave society, I would suggest that the structural revolution of the eighth century is best understood as a consequence of class struggle, and that the dynamic relationship was that between the *agathoi* and the *kakoi*. Some ancient historians feel that class struggle is an anachronistic concept, particularly when employed for such an early period as the eighth century. But 'class' can be used by historians in two ways: (a) with reference to a real, empirically observable content of the relationship between groups; or (b) as a heuristic and analytical category to make sense of a situation in which 'class consciousness' has a less direct correspondence (Hobsbawm 1971, 5–8; E.P. Thompson 1978a, 146–50). It is in this second sense that I speak of class and class struggle.

I am not suggesting that class always provides the best analytical tool for Greek history. Rather, as Finley noted in one essay (1981b, 80), changes in the matrix of rights and duties which make up the structure of any society begin over specific issues. Over these issues groupings which we can usefully call classes coalesce, come into conflict, and reach a resolution.

To put it bluntly: classes do not exist as separate entities, look around, find an enemy class, and then start to struggle. On the contrary, people find themselves in a society structured in determined ways (crucially, but not exclusively, in productive relations), they experience exploitation (or the need to maintain power over those whom they exploit), they identify points of antagonistic interest, they commence to struggle around these issues and in the process of struggling they discover themselves as classes, they come to know this discovery as class-consciousness.

(E.P. Thompson 1978a, 149)

My argument here is that in the eighth century (and again in late seventh-century Attica) class groups formed over specific issues, struggled, and that the resolution of these struggles eventually produced a situation which in theory (and, I think, often in practice) should have resembled that in figure 56b, with the bunched statuses (this time, *not* classes) of citizens and slaves. This was the origin of the polis, and the realisation of the structural relationships of citizenship at the organisational level of reality provided the seeds of the slave society – 'the advance, hand in hand, of freedom *and* slavery' (Finley 1981b, 115).

Dependency in Homer and Hesiod

This interpretation sets the Attic developments in a panhellenic context. Athens may have been the most fully developed slave society in the fifth century, but it was not the only one, and it was not by any means the only polis. We should find the Athenian developments paralleled all over the Greek world. In this section, I will consider the literary evidence.

The earliest sources after the Linear B tablets (which have sometimes been taken as mentioning forms of dependent land tenure) are eighth-century, and Homer and Hesiod both describe a 'patriarchal' household system, without large-scale chattel slavery of the Classical type. Homer's servile terminology is obscure, but those people described as *oikēes* and *dmōes* seem to be dependent and yet not slaves, in that they belong within the community, have at least de facto kinship ties, and often rather more, and are only 'property with a soul' to a very limited extent. However, some historians disagree. Debord (1973, 235–7) suggested that both words refer to slaves captured in war, who went through a process of gradual incorporation into the resident kinship group, reminiscent of the 'open slavery' common in much of Africa (Watson 1980). Gschnitzer (1976, 12) saw a basic continuity in master/slave relationships from Mycenaean to Classical times, and argued that *doulos*, the Classical word for slave, was the 'real' word for a slave in the eighth century, but that Homer used *oikeus* and *dmōs/dmōē* because they were more suitable for the epic. He further traced a development through time in the meaning of *oikeus*, from free to unfree (1976, 16–19). Garland, although accepting Finley's model of the origins of the slave society, suggested that the female *dmōes* in the *Odyssey* were complemented by a male agricultural force of war captives and other bought chattels (1982, 44–7).

These positions have been undermined by Beringer's very cogent arguments. The eight Homeric uses of **doul*-words all seem to refer to real outsiders, true chattel slaves (1982, 25–8), while

the dependency of a *dmōs/dmōē* is that from a chieftain or lord with whom the *dmōs/dmōē* is *already* connected in a 'feudal' [sic] liaison of mutual rights and duties; in contrast to the *doulos* the *dmōs* and the *dmōē* are not rightless before their lord who in turn is bound by certain obligations towards even the lowest members of the estate-household.
(Beringer 1982, 23, n.33)

The longest discussion is Gisela Wickert-Micknat's (1983, 117–212). She does not fully accept Beringer's case, and continues to see most dependents in the *Odyssey* as outsiders, but she too emphasises the great distinction between the 'Unfreiheit' of the epic and Classical chattel slavery.

Hesiod seems to refer to a chattel slave in *Works and Days* 405–6 (*gunaika ktētēn*: although line 406 with *ktētēn* may be a post-Hesiodic addition (West 1978, 260), but his *dmōes* (*Works and Days* 459, 469–70, 573, 597, 608; cf. 441–7, 559–60) are shadowy figures. Nussbaum had no doubts: 'we can be confident that the *dmōes* of Hesiod are personally owned servants, i.e. "chattel slaves"' (1960, 218). However, he offers no reasons for us to discount serfdom, and his position (which assumes that Hesiod's *dmōes* must be like Homer's and that the latter were slaves) leads to the awkward argument that Hesiod describes 'a society which was fully slave-owning but as yet almost wholly un-slave-conscious' (1960, 219). The 'childless female worker' (*erithos*) and the 'homeless labourer' (on the translation of *aoikos thēs*, see West 1978, 309–10) of *Works and Days* 602 may well be hired hands, but the bulk of the extra-familial labour force is probably

to be seen as in a state of dependency rather than as marginal wage-labourers or bought chattel slaves.

I suggested earlier that Hesiod might be placed somewhere near the lower end of the *agathoi*, in Pareto's non-governing elite; and Ernest Will argued that the average household group for a 'middling property' would be 6–12 people (1965, 527). Assuming an *agathos* family of 4 at the top, we would then have some 2–8 dependents, *kakoi*, working on the land or in the house of the *aristos*. Will's reconstruction fits the argument very well, although it must be conceded that it does not have a very strong evidential basis.

The literary evidence, then, is consistent with the argument; in the eighth century, dependency and perhaps serfdom rather than slavery were the norms. We now turn to the archaeological evidence from outside Attica.

Burial patterns

The obvious places to look for parallels with the structure of the Attic evidence are Sparta, Thessaly and Crete, where Classical authors assumed a long history of serfdom. Unfortunately, the evidence is not very satisfactory. There are virtually no graves at all from Sparta, and the material from Thessaly is poor. There were major distinctions at Iolkos around 900 BC, with some adults inhumed in cists (Mastrokostas 1963, 140–1) and others in tholos tombs (Arvanitopoulos 1914). Earlier in the tenth century, children were being buried within the settlement area (Theochares 1956; 1960; 1961). However, the archaeological remains are generally spread over too large an area and too great a time span to allow much comment on structure.

There is more evidence from Crete, but it is not always very helpful. In particular, the use of multiple burial means that we cannot hope to parallel the detail of the Attic study. The use of a fairly homogeneous Subminoan style further means that little chronological precision is possible before the late tenth century. At Knossos, burying groups were small, generally with just one or two adults to a chamber tomb (e.g. Boardman 1960; Hood and Coldstream 1968), and at Karphi tomb M4 had six burials, but the average was just two or three per tomb (Pendlebury 1937/8). Musgrave's study of the skeletal remains from the North Cemetery is pending, but there is as yet little demographic evidence. Charles noted two adults and two children at Karphi (1965, 125), while Knossos tomb EPH/75 was heavily skewed towards adults (Coldstream, Callaghan and Musgrave 1981, 162–5). By and large, the Subminoan tombs are rather undifferentiated, but unusual variety has been noted in the North Cemetery (H. W. Catling 1979, 46). Looting and re-use pose constant problems with the grave associations, however.

All the Cretan sites seem to have had extra-mural cemeteries across the whole Dark Age. One possible intra-mural burial is known from Knossos, but it may not have been a tomb at all (Coldstream 1963, 39).

Table 14 shows the changes in the size of the adult burying group at Fortetsa, the only quantifiable cemetery. The increase in the size of the groups down to 630 is very interesting, although the sudden end of the Knossian cemeteries at this point is rather

Table 14. *Numbers of burials in the Fortetsa cemetery at Knossos (Brock 1957)*

Period	Number of burials	Number of tombs in use	Burials per year	Average per tomb
Late Protogeometric/ Protogeometric B (870–810 BC)	39	11	0.65	3.5
Early and Middle Geometric (810–745 BC)	26	7	0.43	3.7
Late Geometric (745–710 BC)	45	7	1.30	6.4
Orientalising (710–630 BC)	103	5	1.29	20.6

strange. There is indeed very little artefactual evidence from any Cretan site from the late seventh to the early fifth centuries, although sixth-century Cretan pottery has been found at Tocra in Libya (Boardman and Hayes 1966, 78–80), and numerous sixth-century Cretan inscriptions are known. Shortcomings in the chronology may be preferable to suggesting a major discontinuity in Cretan history. This sixth-century caesura is even more alarming than the seventh-century gap in the Euboean archaeological record; we may simply note here that the use of multiple burial does not allow assessment of changes in mortuary variability of the distribution of grave goods, although the wealth of the burials certainly does not fall after 700 BC.

Lefkandi is probably the best published eleventh- to ninth-century site, although the abandonment of the cemeteries in the ninth century diminishes their value. Popham, Touloupa and Sackett (1982a, 247) spoke of the Toumba cemetery as a royal family, although the average adult burying group for the period 1000–850 BC was 5.8, indicating a lineage rather than a single family. There is little difference in the wealth of the graves in the three Lefkandi cemeteries (see fig. 57), although there is a contrast between the *V* scores of Toumba (.3400) and Skoubris (.3000) as against Palia Perivolía (.1425). We will do better to follow developments at sites with a deeper time scale.

Some of the Attic developments around 900 BC seem to be paralleled by structural changes in other regions. All around the Aegean we observe the appearance of new funerary art styles – the Geometric schools, Cretan Protogeometric, Euboean Sub-Protogeometric (if that can be called a new style rather than a degeneration of an older one). At Argos there was a tendency to establish more formal, extra-mural cemeteries c.900–850 BC (Hägg 1982), and new cemeteries were established at Knossos (Hood and Smyth 1981, 16). Changes in ritual were occurring, such as the appearance of cremation at Knossos c.925, and the first multiple cists at Argos (although these had appeared rather earlier at Tiryns). One of the most striking developments is the increasing consumption of wealth in the years c.925–850 BC. Many of the richest Iron Age graves are of this period – at Athens, Agora H16:6, D16:2 and Kerameikos grs.G 41–43; at Lefkandi Skoubris gr.59 and Toumba grs.22, 31–3, 36 and 39; at Knossos, the Khaniale Teke tholos, and Fortetsa tomb XI; at Argos, the Leivaditis grave. Further, the *overall*

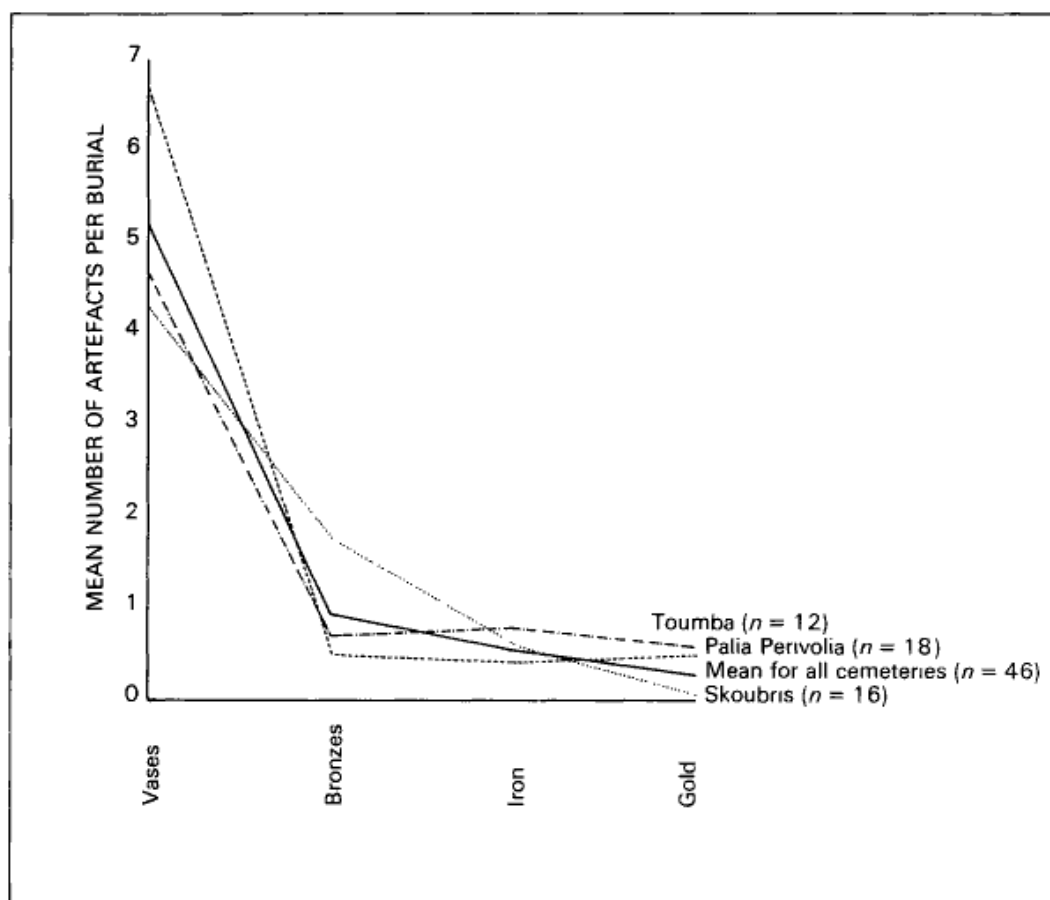


Fig.57. The distribution of grave goods at Lefkandi: mean numbers of artefacts per Protogeometric burial

consumption of wealth rose around 900 BC, as seen in the mean number of artefacts per grave (table 15). The Lorenz curves show no significant differences in the distribution of wealth; indeed at Lefkandi, the *G* scores for both vases and metal are lower in Sub-Protogeometric than before 900.

The similarities in changes in behaviour in these formally very different symbolic systems is highly suggestive. In line with the 'stress hypothesis' discussed in Chapter 2, we might see the greater destruction of wealth and the rapid developments in funerary art as evidence of responses to Aegean-wide factors. The most striking development at Athens at this time is the end of formal sub-adult burial, and the placement of adult graves in unreserved plots within the settlement. This harmonises well with the other processes. The selection of unreserved plots when reserved cemeteries exist can mean many things – sometimes the desire to retain a chief or holy man among the living (Ariès 1981, 33–42), or at other times the rejection of the deceased from the worlds of both the living and the dead (Ariès 1981, 42–5). In 1864, Fustel de Coulanges argued that the Greeks buried their dead in tombs outside their houses, to stress the continuity of the line through physical proximity to the ancestors (1980, 28). He in fact relied on misquoting the Egyptian Theoclymenus in Euripides' *Helen* (lines 1163–8) as evidence for this,

Table 15. *Grave goods per intact adult burial, 1050–750 BC:
Athens, Lefkandi, Argos*

(a) Mean numbers of artefacts per grave		
	Vases	Metal
Athens		
Protogeometric	1.8	4.9
Early/Middle Geometric	2.8	6.9
Lefkandi		
Protogeometric	5.2	1.8
Sub-Protogeometric	6.3	4.6
Argos		
Protogeometric	2.3	0.5
Early/Middle Geometric	5.7	3.8
(b) Gini coefficients of inequality		
	Vases	Metal
Athens		
Protogeometric	.441	.502
Early/Middle Geometric	.377	.582
Lefkandi		
Protogeometric	.502	.758
Sub-Protogeometric	.499	.680
Argos		
Protogeometric	.316	.690
Early/Middle Geometric	.466	.611

but the theory itself is an interesting one. There is nothing to suggest a widening of the burial group in Attica after 900 (see Chapters 4–8); the stress in the system, I would suggest, was primarily *within* the group of the agathoi. The Lorenz curves for Athens, Argos and Lefkandi show a similar distribution of grave wealth before and after 900, and therefore (perhaps) a similar group. As well as increasing the scale of grave goods and the ‘style war’, some descent groups began to define themselves (as in Fustel’s thesis) by the living adopting a closer relationship to the ancestors. The disappearance of sub-adult burials seems to me to be most comprehensible as a consequence of competition within the group.

The separation of adults and children in this way, with the exclusion of the very young from the group of agathoi, is not evidence that early Athens was a ranked rather than a stratified society in Fried’s classification (1967). There are many comparative cases of the children of an elite not being considered as part of the elite for the purpose of burial ritual (e.g. Ariès 1981, 82–92). The social structure created in the funerals is rather similar to that in Homer: to be an agathos you must be born into the class, but it is as a grown man, through your heroic deeds, that you establish your status (and your wife’s, but not, apparently, your children’s).

This also helps us to understand another late tenth-century phenomenon, the appearance of the first archaeological evidence in Attica for grave cult and veneration of the ancestors (Cavanagh 1977, 385–6). Elsewhere, other developments hint at the same thing: the appearance of the first formal cemeteries at Argos has been mentioned; at Lefkandi, burials were resumed in the Skoubris cemetery, among the ancestors, after a

break of perhaps 150 years; and at Knossos, reuse of Late Minoan chamber tombs increases around 850 BC. The development of Cretan Protogeometric B, generally taken as part of a 'Minoan revival' (Coldstream 1977, 69–70), may be seen as linked to this greater emphasis on the ancestors.

There may have been some decline in consumption of wealth by 800, and funerary systems generally changed little between 900 and c.775/750; presumably, the pressures causing the increase in competition among the *agathoi* and which led to the changes of 925–850 slackened off. The decline in grave goods was perhaps not so abrupt as Coldstream suggested (1977, 71; see Barbara Bohen's comments in Hägg (ed.) 1983, 208) and should not be interpreted as a collapse of any kind. In the absence of further evidence, it will not be useful to indulge in too much speculation as to what may have been behind the postulated increase in *agathos* competition around 900 BC, although there are hints of an expansion in the settlement pattern at this time.

1050–750 BC is one of the darkest periods in Greek history. My interpretation of the funerary evidence evokes a picture very different from that painted by Snodgrass, Starr and others, and is closer to the aristocratic society suggested by historians such as Forrest and Finley. The evidence is almost all circumstantial, but I have tried to make my theoretical and methodological assumptions clear at all stages, and my arguments can be tested and perhaps falsified on the basis of the models employed and as new data come to light. For the period after 750, the greater variety of sources allows more confidence in the arguments, as we move from prehistory to protohistory.

Archaic Greece: c.750–500 BC

There are two testable consequences of associating the changes in the Attic burial practices with the appearance of the polis: (1) comparable structural changes should occur elsewhere in the Aegean, since the rise of the polis was a widespread phenomenon; (2) the rise of the polis should be manifested in complementary forms of ritual evidence.

These two propositions will be examined before returning to the social context of the eighth-century revolution.

Burial patterns

I will try to give an idea of the way the Attic evidence fits into the Greek world as a whole, but inevitably it will be necessary to focus on a few relatively well documented cases. I begin with Argos, where the number of graves increased enormously after 750. Snodgrass's chart of this growth (see fig. 23 above) was based on Hägg's synthesis (1974). Courbin (1977) pointed out that a number of the pithoi which Hägg dated as Late Geometric are in fact Archaic, but many more Late Geometric graves have been found in subsequent excavations, and Hägg's figures are quite a reliable guide.

Deilaki stresses the increase in both the size and the diversity of individual plots and cemeteries (1982). In particular, we see the appearance of a large substratum of poor, undifferentiated pithos burials alongside the richer cist graves. Hägg is surely correct in seeing the pithoi as the graves of a subordinate social group, who are not very visible before c.750 (1983). Wealth of grave goods may be a consistent indicator of prestige

throughout Late Geometric in Argos, since the richest of the graves – unlike those at Athens – all come late in the phase: note especially the warrior burials in the Stavropoulou, Theodoropoulou and Bonoris (gr.45) lots. The G-values are much higher in Late Geometric than in Early and Middle Geometric, rising from .488 to .654 for pottery, and from .598 to .826 for metal; and, just as at Athens, grave plots belong to descent groups cross-cutting *agathos/kakos* divisions, with poor pithos graves and rich cist graves together (Deilaki 1982, 41).

There is also an increase in numbers of sub-adult graves at Argos in Late Geometric (table 16), but this may be influenced by the movement of the adult cemeteries outside the town about 700 BC, while child burials continued within the settlement area. The concentration of rescue excavation within the area of the ancient town walls has probably favoured the discovery of child graves in Late Geometric II. This move away from intra-mural burial about 700 BC is also paralleled at Athens. Many Middle and Late Geometric plots were built over (Hägg 1974, 45; 1982), although the abandonment of intra-mural graves was never complete. After 700, most adult graves were in two large ‘citizen cemeteries’, north of the town around the hospital (Deilaki 1964; 1980; 1982; Courbin 1977) and south of it around the stadium (Charitonides 1966). These are only partly excavated, but Deilaki’s work suggests large plots in large cemeteries. Burials tended to be without grave goods, in simple cylindrical pithoi (Hägg 1983, 30–1).

The extensive French excavations in the Kypseli area have resulted in the publication of seven adult, eleven child and two uncertain graves (although three of the adult burials were in one pithos, gr.225). Just two of the graves were particularly distinguished. Agora gr.223 (c.600 BC) had been re-opened in Hellenistic times, but still contained a bronze bowl and four iron horse bits (Daux 1967, 825); and a poros sarcophagus in the Bakaloiannis lot which had been robbed nevertheless still contained two gilt iron pins and a seventh-century terracotta plaque. Settlement evidence from this area spanned the whole seventh century (Courbin 1954, 180; 1955, 312; 1956, 369), and the grave was definitely intra-mural.

The seventh-century evidence suggests that the trends beginning in Late Geometric were carried further: virtually no wealthy graves were allowed. Since the only known examples occur in the area around the Agora, which is now quite well explored, we might conclude that these were very unusual plots, perhaps of the Argive royal line or of heroes. The most impressive Archaic grave of all dates c.525–500 BC and comes from the Kanellopoulou lot, just south of the agora (Kritzas 1973, 132). A large poros tomb stood above two warrior inhumations, accompanied by fifty vases and many bronze and iron weapons. This seems likely to be a hero burial.

The Argive evidence certainly seems to be consistent with the argument advanced here, and the funerary ideology can perhaps be summed up: (1) c.750 BC: the admission of the *kakoi* to the formal cemeteries, but in graves very different from those of the *agathoi*; (2) c.700 BC: the disappearance of all but a very few distinguished burials; the denial of differences between the citizens of the polis.

One of the developments c.700 BC was the abandonment of the cist grave. In Late Geometric, these were generally the richest graves, and some were used almost like chamber tombs, for up to seven successive inhumations (Papaparaskevas grs.263, 265,

Table 16. *Adult and sub-adult graves at Argos, 900–700 BC*

	Adult	Child	Unclear	<i>n</i>
Early Geometric	60.5%	7.9%	31.6%	38
Middle Geometric	46.2%	19.2%	34.6%	26
Late Geometric I	70.0%	30.0%	—	10
Late Geometric II	44.4%	33.3%	22.3%	54
Total Late Geometric	53.75%	27.5%	18.75%	80

266 and 278 (Daux 1967, 844)). These graves have been taken as evidence for the rise of aristocratic family consciousness in Late Geometric times (e.g. Snodgrass 1971, 194–6; Hägg 1983, 30). After 700, this development was blocked, and such overt groupings were subsumed within the larger ‘citizen cemeteries’. It is interesting to note that in the chamber tomb cemeteries of Thera and Knossos, no new tombs were dug after the early seventh century, although the old tombs continued in use. As mentioned earlier, the Knossos cemeteries seem to go out of use before 600, but by the sixth century at Thera nearly all burials were individual cremations. On the other hand, chamber tombs continued to be built in Thessaly into the sixth century.

Corinth provides another good example of the early polis. There was an increase in the size of grave plots during Middle Geometric II, along with the appearance of a number of rich burials, usually robbed (Morgan 1937, 537–41). Developments at Corinth began rather earlier than at Athens or Argos; after 750, virtually no burials were made within the settlement area (see Williams 1982, 11–12), and new extra-mural cemeteries were being laid out by c.770 (Young 1964, 21–3). The same may be true at Moulki (Verdelis and Alexandri 1961/2). Further, after c.750 grave goods decline markedly, thirty years earlier than at Athens and fifty years ahead of Argos (see table 17).

Unfortunately there is very little evidence before the upsurge c.770 with which to compare the Corinthian Middle Geometric II and Late Geometric graves. Corinth was probably settled c.925 BC (J. Salmon 1984, 45–53), and the earliest graves are in clusters of two and three while the eighth-century plots tend to have six to eight adults. However, chronological control is not precise, particularly in the important North Cemetery. The ‘citizen cemeteries’ established before 750 continued in use throughout the eighth to sixth centuries, again with virtually no differentiation between the graves. In the North Cemetery, plots remained large, except for an apparent hiatus in Early Protocorinthian. This might be due to the great difficulties of dating these graves very precisely, or even a result of emigrations to Syracuse and Corcyra; however, an Early Protocorinthian grave has been found by chance in one of the other large Corinthian cemeteries (Weinberg 1974, 527–34).

No particularly distinguished graves are known until c.550 BC, when North Cemetery gr.206 contains an iron spearhead, and gr.240 had a grave stone. A contemporary burial on the road out of Corinth towards Sicyon was marked by a marble sphinx (Deilaki 1973/4, 200). In the last quarter of the sixth century, gold and silver come from North Cemetery grs.250 and 257. The Archaic graves from the countryside of Corinthia

Table 17. *Mean contents of burials in the Corinth North Cemetery, c.700–720 BC*

	Vases	Metal
Middle Geometric II (c.770–750 BC: grs.14–24)		
Adult	2.4	1.8
Child	0	0
Late Geometric (c.750–720 BC: grs.25–48)		
Adult	0.1	0.1
Child	0.8	0

are generally poor too, although a poros sarcophagus dated c.575 BC from Examilia had twenty-six vases (Lawrence 1964, 94–101) and a late seventh-century sarcophagus from Solomos with two inhumations in it had nineteen vases and a bronze bowl (Krystalli-Votsi 1976, 64).

A funerary ideology of denial of differences in status, with very few exceptions allowed, operated at both Argos and Corinth throughout the Archaic period, judging from present evidence. There was in both cases a slight tendency towards increasing consumption in the later sixth century. The ideal of the polis developed consistently from c.770 at Corinth and c.750 at Argos, in spite of the rise and fall of tyrants and oligarchies. This is not wholly surprising; for instance, Ariès argues that it was not the political consequences of the French revolution, but general tendencies in thought, what the French historians call *mentalité*, which lay behind the drastic changes in Parisian funerary practices between 1750 and 1850, and indeed behind the revolution itself (1981, 475–531). The archaeological record manifests the structure of the community, not the particular form of government. What we see at Argos and Corinth is the rise of the citizen estate in the eighth century BC, and its subsequent development.

Aristotle (*Politics* 2.1265b13–16) records a story that the Corinthian legislator Pheidon passed a law which in some fashion guaranteed the rights of individual households to landholdings. He calls Pheidon ‘one of the most ancient lawgivers’, and John Salmon seems to think that a late eighth-century date is appropriate (1984, 65). Coming from a late fourth-century source the tale is of course questionable, and if it is to be accepted at all a much later date might be preferable. Aristotle credits another Corinthian, Philolaos, with drawing up a similar law at Thebes (*Politics* 2.1274a31–b6). Aristotle says Philolaos was a member of the Bacchiad family, whose rule at Corinth was overthrown by Cypselus the tyrant (probably in 657 BC), and adds that he was a lover of Diocles, a Corinthian victor in the Olympiad of 728 BC. Aristotle thus in effect places Philolaos in the late eighth century, although his story lacks credibility. It is tempting to suggest that Pheidon and Philolaos were active only in the seventh or even the sixth century. Whatever the date, though, their laws represent formal recognition of the citizen estate, and could emerge only within the polis community.

Aristotle also tells us that the Argives had *perioikoi*, ‘livers around’, and normally non-citizen dependent labourers, as late as the battle of Sepeia (? 494 BC; *Politics*

5.1303a7–8), although Herodotus (6.83) uses the word *douloi*, slaves, in the same story. This may simply be lax use of terminology; and a celebrated passage in Pollux speaks of a group called the *gymnētes* at Argos as ‘between slavery and freedom’ (Pollux 3.83).

There may be some mythical elements in our stories about Sepeia, but the terms *perioikoi* and *gymnetes* seem real enough. However, this does not seem to be a serious objection to the argument that the citizen estate was evolving at Argos in the late eighth century, and serfdom was declining. Lotze has argued cogently that these Argive terms, along with the *korynēphoroi* or *katōnakophoroi* of Sicyon and the *konipodes* of Epidaurus, represent survivals in terminology from an earlier period, describing peasants who had by the sixth century become citizens (1959, 53–5. *Contra*, Cartledge (1980); Whitehead (1981) suggests Sicyonian serfdom was abolished in the seventh century BC, by the Orthagorids). Lotze’s interpretation, then, agrees with the argument that serfdom existed in the Dark Age, but disappeared in the eighth century in the more advanced poleis. However, I cannot accept Lotze’s general conclusion (1959, 69–78) that serfdom was always the result of the conquest of indigenous peoples by Dorian invaders in the Early Dark Age.

It was noted above that Knossos had extra-mural cemeteries throughout the Dark Age, and this was also the case at many sites which were founded in the tenth or ninth centuries. Andreiomenou has shown how the expansion of Eretrian settlement in the eighth century covered over earlier adult graves which had been extra-mural (1981, 192–8), although child burials continued within the town. The best example is Zagora on Andros, where much of the settlement has been explored and no graves found, while a few burials have been detected in the area beyond the walls (Cambitoglou 1981, 99–108). This also seems to be the case at Koukounaries, Tsikalario, and several other Cycladic sites. The situation at the main town on Naxos is interesting; formal extra-mural cemeteries existed throughout the Dark Age (Lambrinoudakis 1983, 165), and intra-mural burials in the site at Grotta seem to have been rare (Kondoleon 1971, 172–80; Lambrinoudakis 1974, 189–93; 1980, 259–62), but the recent excavations on the Mitropolis site have uncovered tenth- and ninth-century adult graves within the settlement, which have been interpreted as a hero cult (Mylonas (ed.) 1984, 77–9). This is clearly a very important site.

Some of the other Cycladic settlements seem either to have begun or else greatly expanded their cemeteries in the mid- or late eighth century, in spite of probable foundation dates of c.950–900 BC. On Melos, there is some evidence for the use of the Phaneromeni cemetery in the tenth century (Desborough 1952, 321; Coldstream 1968, 164–67; Cherry 1982, 293), but the great bulk of the pottery is Late Geometric; the same is true for Thera, where at least one vase may be Late Protogeometric (Sperling 1973, 38) but the very extensively dug cemeteries start c.770 BC. At Paroikia, the earliest published graves are c.700 BC (Zapheiropoulos 1960; 1963; H. W. Catling 1984, 53), but the settlement certainly goes back to 950 BC (Rubensohn 1917, 73–85).

Many of these cemeteries form a group, with practices continuing throughout the seventh century much as they had done in Late Geometric, without any further movement towards the denial of differences within a citizen body. Some of the richest burials

of the Cretan and Cycladic cemeteries are seventh century: at Knossos, Fortetsa tomb I and the Khaniala Teke tholos dromos deposit; several tombs at Prinias; and a remarkable grave with over 100 vases from Sellada on Thera (Zapheiropoulos 1982). It seems as if the new attitudes of the eighth century were followed up only to a point in these areas. The cemeteries probably represent complete descent groups, as at Corinth and Argos, and at Thera and Paroikia a full age structure certainly appears. However, the next step, of denying the importance of differences within the citizen body, was not taken.

Other regional patterns can be detected. In some areas, the polis idea seems to make its first appearance only rather later. The cemeteries of Samos, mentioned in Chapter 9, might suggest the emergence of this form of social structure in the mid-sixth century, in the time of the tyrants; while the rather richer evidence from Boeotia suggests that the early sixth century was the most important stage. At Thebes, there was some movement of cemeteries from c.800 BC onwards, but the major relocation and expansion in numbers comes only after 600 BC (Symeonoglou 1985, 84–114). The late seventh/early sixth-century cemetery growth is repeated at Tanagra, at Ag. Eleousa Pyriou, and particularly at Akraiphnion, where 663 graves were found up to 1977, nearly all dated to the period 575–400 BC (Andreimonou 1973/4; 1974; 1975; 1976b; 1977b,c; 1980; 1985). The early excavations at Rhitsona revealed a similar growth in numbers in the early sixth century (table 18). There is a considerable increase in variability in the sixth century, in particular the appearance of primary cremations and a group of relatively poor pithos graves, although variability in pottery grave goods changed only minimally (for 725–600 BC, $G = .461$; 550–500 BC, $G = .469$. For 600–550, $G = .621$, but this score is heavily dominated by the 274 vases in gr.86, which Ure (1934, 22–3) dated by the pottery to 570 BC, but which would be more consistent with the later group of graves). The late sixth century graves are remarkable for the great number of vases used, with gr.49, the richest, having 420, and a silver bowl. The mean number of vases per grave was 140, and the excavators felt confident that each grave was a single burial.

It can hardly be argued that many of the main sites in Boeotia were virtually uninhabited until the early sixth century (e.g. see Buck 1979, 87–105, and table 12 above), and Hesiod's general tone suggests a reasonably well peopled landscape. The Boeotian material seems to fit the pattern for polis development well, if at a late stage, and deserves fuller study than I can give it here.

The western colonies, on the other hand, generally seem to have adopted a polis pattern of cemetery organisation immediately. The best case is Pithecusae, where the cemetery seems to have a similar structure to that of the Attic Late Geometric cemeteries, including a full integrated age structure (Ridgway 1984, 85–95). There was a decline in grave goods after 700, particularly in silver ornaments, but this may be associated with a partial abandonment of the site in favour of Cumae. This site had some spectacularly rich seventh-century burials (e.g. Pellegrini 1903, gr.104; Albore-Livadie 1975). However, native Italian burial customs reached a peak of magnificence in the seventh century, and the Cumae practices may owe as much to their neighbours as to Greek patterns.

There is certainly plenty of evidence that the Athenian changes around 750 BC were part of a very large-scale process, but after 700 the Athenians diverged from the main

Table 18. *Numbers of burials at Rhitsona in Boeotia*

Period	Numbers of graves	'Population' ¹
Late Geometric to Early Corinthian (c.725–600 BC)	12	3.2
Middle and Late Corinthian (c.600–550 BC)	18 ²	12.0
'Boeotian kylix' (c.550–500 BC)	28	18.7

Notes

1. Calculated with the first formula discussed in Chapter 5; the age structure of the cemeteries is unclear, but what evidence there is seems to indicate a fairly constant under-representation of sub-adults.
2. Taking pithos graves 96, 101 a,b, and 125 a–e as Middle or Late Corinthian, and including the two destroyed graves in the trench with grs.125 a–e (Ure 1934, 7).

Sources: Burrows and Ure 1907/8; 1909; Ure 1910; 1927; 1934

trends of development, which either continued as in Late Geometric or advanced further towards the denial of status differences within the citizen body.

Complementary patterns

These indications of the scale of the processes at work in the eighth century receive strong support from other classes of evidence. Some archaeologists argue that we can draw a distinction between 'individualising' consumption of wealth in lavish single burial and its 'communalising' use in the construction of monuments emphasising the group as a whole (e.g. Renfrew 1974; Bradley 1984). This approach suggests that we should see the appearance of communal monuments around 750 BC. A second line of inquiry could stem from the nature of the polis as a religious association; we will expect to find evidence for the emergence of new, community-based religious practices in the eighth century.

Dark Age religion is poorly understood. The continuity in names of some deities from Mycenaean to Classical times was mentioned in Chapter 1, but after the abandonment of most Bronze Age cult centres in the twelfth century, there is little material evidence. De Polignac rightly draws attention to the 'spatial indeterminacy' of Dark Age cult (1984, 27). There has been excitement recently over the cult activity from c.900 BC onwards at Kommos (Shaw 1982; 1984) and Kalapodi (Felsch *et al.* 1980), but these seem to have been rustic shrines, divorced from settlements. On Crete, there is a small amount of evidence for the continuing use of Bronze Age cave sanctuaries until Archaic times, but these fall into the same general class. Within settlements, cult was domestic, as was perhaps the case in Mycenaean times (eleventh-century Asine (B. Wells 1983, 34); tenth/ninth-century Nichoria (McDonald *et al.* 1983, 33, 40); ninth-century Koukounaries (Schilardi 1978, 204; 1983, 175–7)). Several excavators have claimed to have proven that cult activity at their sites went back into the Dark Age, or was even unbroken from Mycenaean times, but there is little evidence to support most of these arguments (see Snodgrass 1971, 394–401). The strongest case for an intra-mural sanctuary is the celebrated eleventh-century 'temple' at Karphi, but even this must be highly suspect. Spindle whorls, stone tools and typical domestic pottery were found there (Pendlebury 1937/8, 76), while clay 'goddesses' were also found in five rooms in



Fig.58. The eighth- to fourth-century BC sanctuary of Athena at Koukounaries on Paros, after the 1985 excavation season (photograph D. Connelly). See also fig.51 above

other parts of the settlement, and assorted 'cult' objects in a further fourteen rooms.

Whatever views are held on the continuity of beliefs, no one can deny the profundity of the change in practices in the eighth century. The first bounded areas reserved exclusively for religious activities appear, with sanctuary areas marked off from the surrounding space and enclosed by walls. Altars began to be built in a more and more monumental style, and in the late eighth century temples began to be common. The practices themselves changed too; the meagre dedications of the tenth and ninth centuries were replaced by vast numbers of votives, reaching a peak in the seventh century. Table 19 gives an idea of the scale of changes in practices, and the list of sites could be enormously extended.

Archaeologists often make a connection between the seventh-century decline in grave goods in some regions and the rise in sanctuary dedications. While we cannot simply assume the replacement of 'individualising' competition with the rise of the communal sanctuary, the sanctuaries do seem to have acted as a focus for the polis in Archaic times, and as a source of pride and even open rivalry between poleis (Snodgrass 1980, 58–62; 1986). De Polignac suggests that

it is not . . . a 'concealment' of realities of conflict. It is, on the contrary, the arena where conflicts are externalised and played out, where the essential element is a re-ordering from which a more coherent social structure emerges, one which is also more efficient than that which Greece knew in the 'Dark Ages'.

(1984, 84)

Table 19. *Increasing dedications at Greek sanctuaries, c.1100–600 BC*

	Eleventh/tenth centuries	Ninth century	Eighth century
Delphi: bronze figurines	0	1	152
Mt Ptoon: bronze tripods	0	0	7
Delos: bronze dedications	0	1	19
Olympia: terracotta figurines	10	21	837
	Eleventh/tenth centuries	Ninth/early eighth	Later eighth/seventh
Philia			
bronze fibulae	0	2	1,783 +
bronze pins	1	4	37
Perachora			
bronze fibulae	7	1	50 +
bronze pins	0	15	81
Argive Heraion			
bronze fibulae	16	10	88
bronze pins	3	c.250	c.3,070
Lindos			
bronze fibulae	0	52	1,540
bronze pins	0	0	42
Mt Imittos: vases	69	116	965

Sources: Mt Imittos, Langdon 1976; all others, Snodgrass 1980, 53

Anthropologists stress the multiple meanings of rituals, which can challenge the social structure as well as creating it, and almost inevitably mean different things to different participants (e.g. Llewelyn-Davies 1978; Moore 1986), but the nature of archaeological evidence does not allow us to work at this level of detail. This does not invalidate the study of material remains of cult activities; it only means that we will work at a more abstract level.

The hierarchy of the new religious practices was complex. Most poleis, in addition to a sanctuary within the town, established another major cult place in the rural hinterland, which de Polignac sees as a vital part of the spatial definition of the state. Interestingly, Athens, which seems to have diverged from the polis line of development around 700 BC, is the only major state with a 'monocentric' as opposed to 'bipolar' religious organisation (de Polignac 1984, 86–9). Attica is also unusual in that the diversion of wealth into the seventh-century sanctuaries was meagre compared to that in state sanctuaries like the Heraia near Argos, and at Perachora and Samos, or the temple of Apollo at Eretria; even Eleusis, Sounion and the Acropolis have produced very few metal finds or Near Eastern and Egyptian imports. Similarly, when other poleis were building the first monumental dressed stone temples in the early and mid-seventh century, the Athenians seem to have stayed with smaller, more primitive structures. The nineteenth-century Acropolis excavations could hardly have destroyed all traces if there had been an early monumental temple.

The extreme poles of religious practice in Archaic Greece are the small shrines which seem to spring up everywhere, and the great panhellenic sanctuaries. There were many small peak-top sanctuaries in Attica, sometimes established in the Dark Age, but always most heavily used in the eighth and seventh centuries (Langdon 1976; Lauter 1985b).

An interesting feature on the Aegean islands is the frequent continuation of cult through the sixth century at shrines in settlements which were themselves abandoned during the seventh century, and even the construction of post-abandonment temples.

The panhellenic sanctuaries at Olympia, Delphi, Delos and Dodona began to flourish in the eighth century, although at least at Olympia the seventh century may have been a more important period. The sanctuaries are a complex phenomenon; they certainly contributed to the creation of an aristocratic culture of athletics and music which transcended polis boundaries, but also provided further opportunities for the self-definition of the polis.

The concept of pollution is the key to understanding the relationships between the cemeteries and the sanctuaries. Most historians rightly see the movement away from intra-mural burial in the eighth century as linked to the idea of death and the dead as polluting. In Archaic Greek thought, both the gods and the dead were sacred, and the boundaries between their parts of the world and that reserved for men were protected by sanctions of pollution. It is generally accepted now that pollution beliefs are one of the principal methods by which people structure and define culture; the pure obeys not natural but cultural ideas of order, and pollution arises from the breach of social categories (Douglas 1966, 140–97; J.M. Redfield 1975, 160–223; Parker 1983, 61–4).

In the late eighth century, the boundaries between the gods, men and the dead began to harden, both physically and conceptually. I discussed the movement and walling off of Athenian cemeteries at this time in Chapter 4, and the spatial definition of cult areas was briefly described above. At the same time, men were beginning to wall off the settlement sites themselves. Circuit walls of late eighth-/early seventh-century date are known at many sites, including such a large town as Eretria (C. Krause 1972; Themelis 1983), and a probably slightly later wall is known at Corinth (Stillwell 1948; Williams 1982, 12–15). It has also been argued that walls were built around 700 BC at Thebes (Symeonoglou 1985, 89) and Athens (Lauter-Bufe and Lauter 1975, 2). Certainly several Cycladic sites were walled from the earlier ninth century, and it is not my intention to gloss over the obvious and important defensive functions of the walls. I seek only to draw attention to their symbolic roles, and the sudden increase in their occurrence around 700 BC.

The living space was more sharply differentiated from the sacred spaces of the gods and the dead, and the boundaries emphasised by physical barriers. De Polignac suggests that the placement of major rural sanctuaries in liminal positions, on polis borders and at the meeting of the tilled land and the mountains, further served to define the boundaries of the worlds of nature and culture (1984, 41–87). The same nature/culture distinction can be seen in Homeric thought, where the sharpest line in the human landscape is drawn between the plain and the *agrou ep' eschatiēn*, the wild world of nature (Redfield 1975, 189–92). Homer also puns on the word *krēdemnon*, which means at once a city wall and a woman's bridal veil, as a symbol of the purity of the living space as against the space outside (Redfield 1975, 161).

The conceptual boundaries were hardening as well. Pollution changed in character in the early seventh century. There is certainly a metaphysical side to Homeric and Hesiodic pollution (Vernant 1980, 115–17; Parker 1983, 294), but their concepts of dirt

and purification are more 'positivist' and simpler than those of the later authors. The lines between the gods, men and the dead were beginning to be much stronger, and protected by more sophisticated sanctions. These changes in the boundedness of the physical and conceptual spaces allotted to the groups suggest a new element in systems of classification, putting greater emphasis on defining the place of man in the cosmos. Vernant, in particular, has argued that Hesiod used the myths of the five ages and of Prometheus and Pandora as models of and for man's place within the structure of the universe (1980, 130–85; 1981; 1983, 3–72).

Archaic Greek philosophical thought was run through with the idea of the association of opposites. The world was divided into opposed pairs of concepts, and each side of each binary opposition associated with the corresponding side of all the other pairs. Thus male was to female as right was to left, east was to west, good was to bad, life to death (G.E.R. Lloyd 1962; 1964; 1966, 42–8): and by the same token, we might add the polarities of men and gods, culture and nature.

The association of polarities is already clear in Homer and Hesiod. It was brought to its most formalised state in a Table of Oppositions drawn up in the sixth century by some of the followers of Pythagoras (Aristotle, *Metaphysics* 986a22ff). I am not suggesting that the principle of the association of opposites began in Greece in the eighth century; 'religious polarity' is a very widespread structure of thought, and has some claims to be a universal human system of classification. No doubt the ancient Greeks always thought in terms of such polarities, but in the late eighth and early seventh centuries the rigidity of the divisions seems to have increased substantially.

The use of space helped to create man's status as a *politikon zōon*, the 'creature of the polis' which Aristotle described. At Athens, new attitudes to purity will have served to sever the physical ties some households had established with the ancestors c.900 BC by burying them within the space of the living. I have argued that the new polis ideology of the eighth century bound the community together through the creation of the citizen estate. For such a structure to work powerful sanctions must be applied to transgressors, which might explain the change in attitudes, as new ideas of pollution forced everyone to bury together. Henceforth, only the graves of heroes and founders were allowed in the space of the living, usually in the agora or by a gate. It was suggested in Chapter 4 that the sixth-century cemetery in the Athenian Agora may have been that of the Peisistratids, and the Argive intra-mural burials were equally exceptional. When the Corinthians chanced across an Early Geometric grave in their agora around 625 BC, a hero cult was immediately established (Williams, MacIntosh and Fisher 1974, 1–5); the link between intra-mural burial and the hero seems to have been a compelling one.

The herōon is itself an important eighth-century development. Bérard suggests herōa were centres of communal cult, denying status distinctions within the polis, while subtly promoting aristocratic control. His argument is that aristocratic competition and overt exploitation were no longer acceptable in the late eighth century, and the nobles were attempting to disguise the inequality of the social system by involving everyone in shared adoration of the heroes (1982, 97): the very men who were the nobles' own direct ancestors. De Polignac has also claimed that the hero was a crucial but ambiguous figure in the emergence of the polis:

all these heroes are located at the meeting point of two worlds, of two ideologies, of two sets of military and political values. The hero plays the role of the first and the last champion of the polis.

(1984, 147)

There may have been earlier tendencies to heroisation, as at Lefkandi (Popham, Touloupa and Sackett 1982b, although this is questionable) and Grotta (mentioned on p. 187 above), but the radically new practices around 700 imply a new role.

The cult of Mycenaean tombs is closely connected. This generally began around 750 BC. None of the earlier cases cited by Theodora Hadzisteliou-Price (1979) are convincing; the only possible example is a series of dedications at Koukounaries in a cave used for a Late Helladic IIIC burial, beginning c.950 BC and continuing into the seventh century (Schilardi 1975b, 82; 1976, 289). However, the stratigraphic sequence suggests that the worshippers were unaware of the burial (Koukounaries notebook: Cave 1, 1976), and the ritual may have been aimed at the cave itself, as was the case with some other contemporary cults (see Snodgrass 1982a, 113–14). Coldstream (1976) suggested the influence of epic poetry was behind the tomb cult, along with changes in funerary practices. However, it seems that Homer already knew of the efficacy of tomb cult (Hadzisteliou-Price 1973), and Snodgrass has plausibly proposed that the cults were provoked by population growth and the desire of the free peasantry to establish ties with the land (1980, 38–40; 1982a). Another element may be involved: as with the *herōa* of recently dead warriors and founders, the *agathoi* probably derived legitimation from the tomb cults. The heroic *basileis* were cast as the ancestors of the living *basileis*, who often traced their pedigrees back to the world of Odysseus. By making dedications at their tombs, the peasantry was in part offering support for the dominance of the *agathoi*: another case of the ambiguity of ritual statements. I have argued elsewhere that the recording of epic poetry, and even the introduction of writing to Greece, belonged to this pattern of clashing ideologies in the eighth century (I. Morris 1986a). To some extent, the world of the Olympian gods is seen as an homology of heroic aristocratic society. These structures contrast sharply with the emerging polis ideal of the eighth century, and are perhaps best interpreted as attempts to legitimate a vanishing ideal. Nicolai (1983) may be correct to identify elements of the poems which approve of the administrative organs of the state and are critical of the horrors of war, but the central theme is always the might of the *agathoi*.

This interest in the Heroic Age was probably the cause behind the florescence of representational art c.750 BC. Snodgrass has argued persuasively for a mixture of the heroic and the contemporary in Late Geometric figured art (1980, 65–78), and again we seem to see the past being appropriated to serve sectional interests in the eighth century.

Other aspects of material culture suggest social change in the eighth century. For many years, archaeologists confidently associated 'cultures', repeatedly recurring distributions of similar material traits, with manifestations of political or ethnic groups. More critical approaches in the 1970s questioned traditional stances, and Renfrew (1977) went so far as to suggest that the whole notion of cultures should be dropped from

the archaeological vocabulary. This view is perhaps extreme, in that distinctive non-random association groups do exist in the archaeological record; the question is what to make of these (Hodder 1982a).

We might expect there to have been changes in culture groupings in the eighth century, if radically new social formations were appearing. Coldstream (1983) emphasises a sudden increase in the regional diversity of pottery styles at this time, and associates it with the rise of the polis. Unfortunately, no quantitative studies of ceramic cultures have been undertaken, nor do the cultures identified by Coldstream always fit very well with polis boundaries. This may be too simple an approach.

Recent work has led to stress on the need to break the cultural whole down into its constituent parts, and to consider the information potential of each artefact type separately (Hodder 1978; 1982a; Shennan 1978). Given the importance of burial practices in the definition of the group, the major differences in regional customs should be informative. As with the pottery, though, the evidence is ambiguous, and the main culture areas in fact go back to the twelfth century, without becoming noticeably more pronounced after 750.

Consideration of the evidence within Attica is more rewarding. In Chapter 8, I drew attention to the sudden increase in variety of burial forms across Attica in the eighth century. From 1100 to 750 there was considerable consistency in burial practices from Athens across to Thorikos, although Eleusis always had distinctive customs; and the same homogeneity, with relatively few regional peculiarities, was seen in the seventh and sixth centuries. However, in Late Geometric times each major site in Attica had its own distinctive burial form, and there was also variety between individual cemeteries at sites like Athens and Merenda.

Hodder (1982a, 186–90) has argued that when competition between groups increases, people will make greater use of material culture to define themselves in opposition to outsiders. Any interpretation of the Attic variability must be rather speculative, but this perspective leads to a reading which is consistent with the literary tradition that Attica originally consisted of several distinct political groups, which were brought under control in a series of wars (the evidence has been reviewed recently by Diamant (1982) and Simms (1983)). We might suggest that local boundaries were coming under ever greater pressure in the eighth century as a result of increasing centralisation, and that some groups were using material culture, and in particular burial practices, to counter this centripetal tendency. All to no avail, of course; by the early seventh century the cultural uniformity of Attica was greater than ever. The links between material culture and narrative political history are tenuous, but if we wish to accept the traditions of Athenian wars against Eleusis and Marathon at face value, then the late eighth century is probably the best time for them.

Such approaches may prove to be a good starting point for further investigations of the spatial organisation of the early polis. In all, the complex patterns in the evidence are consistent with the idea of a profound change in social structure in the eighth century, and the rise of the polis out of a mass of competing world views. Before looking to the burial record of Archaic Attica, though, we must ask some more questions about the processes at work in the eighth and seventh centuries. The polis was not the only poss-

ible outcome, nor was its success ever assured: in Attica, it was rejected after about two generations. Different approaches, independent of the archaeological record itself, are necessary if we are to understand the burial evidence.

A brave new world?

So far, I have sketched Finley's model of the emergence of the polis as part of the rejection of dependency as an acceptable relationship, and have argued that this is the best way to understand the changes in the archaeological record. This approach focuses on the relationship between the *agathoi* and *kakoi* as the dynamic force for change. But it is not the only view possible, and indeed the current orthodoxy centres on an entirely different relationship within the structure of the polis. Most historians and archaeologists hold that the main force in Archaic Greek history was a set of military changes in the early seventh century which widened the group playing an active role in warfare. This is the hoplite reform, mentioned in Chapter 1.

It is usually suggested that Dark Age battles were disorganised skirmishes between small groups of aristocrats, often fought out at a distance, while the commoners, if they took part at all, were limited to cheering or throwing stones. This is held to have changed somewhere between 700 and 650 BC, with the appearance of the phalanx, a massed formation of bronze-clad warriors. The phalanx depended on numbers for effectiveness; and its use is taken to imply a widening of the militarily significant group to include large numbers of non-aristocrats. There are two main views of what happened next: either the hoplites realised their military importance, and as a result came to challenge the aristocratic monopoly of power, or the hoplites, already disgruntled, used their new-found importance to demand equality with the nobles. Whichever way round the formula is put, the hoplite reform is generally associated with the rise of the tyrants, who are seen as the representatives of the hoplite class.

The arguments stem largely from a statement of Aristotle's (*Politics* 4.1297b16–29) that the replacement of cavalry warfare by hoplite warfare led to a widening of the constitution. This of course was written at least 250 years after the proposed event, and the case for Aristotle's authority is backed up by contrasting the warfare in Homer and in Attic Late Geometric vase paintings with that in the seventh-century poets, and by arguing that the new forms of armour and the double-grip shield which appear in the archaeological record around 700 BC mean that warfare was coming to rely more on numbers (Lorimer 1947 is the fullest exposition). No ancient author explicitly links hoplites and tyrants, and the connection is based on the chronological coincidence of the two.

The links between the hoplite reform and the rise of the polis have been drawn out by several French historians, who see the phalanx as an integral part of the political system of thought and meanings. For Detienne, there is 'a homology of structure, an identity of models' between the two (1968, 140), while for Vernant 'Politics can be defined as the city seen from the inside . . . War is the same city facing outwards' (1980, 25). The unity of the phalanx and the polis suggested by these and other historians is often bolstered up by reference to the unsuitability of hoplite warfare to Greek topography, in a country so well-suited to light infantry, where many poleis were separated by rugged mountainous

ground, the Greeks for three centuries fought in formations which they recognised required both sides to accept a set of rules and to fight on level plains with secure flanks (e.g. Herodotus 7.9.1).

The symbolic aspects of hoplite warfare and the Athenian uses of the funeral speech as a forum for the creation of polis structures cannot be denied. But the phalanx could also be a devastatingly effective fighting force, as the Persians discovered, and we should not lose sight of its more pragmatic features. In the funeral orations of Classical Athens, death in battle as a hoplite was the culmination of citizenship, but the hoplites were never the same as the citizen body itself. A hoplite had to provide himself with a very expensive bronze panoply, which probably required a considerable outlay. It was rare for as many as half the citizens of any polis to qualify as hoplites (Snodgrass 1965, 114; Cartledge 1977, 23), and Aristotle underlines the point that in the fourth century the hoplites came from the ranks of the wealthy, and could be distinguished from the poor (*Politics* 4.1289b32, 1297a31; 5.1305b33). Detienne made a feeble attempt to dismiss Snodgrass' point in a footnote (1968, 129–30, n.56), but this does not alter the basic facts of hoplite warfare. The phalanx was not isomorphic with the polis; the hoplites must have belonged very largely to the group I have been calling the *agathoi*. A Hesiod would have fought alongside the *basileis* (or, knowing him, a little behind them) in the phalanx; the *kakoi* would not. The 'phalanx as the polis' perspective must be able to accommodate this observation. It also means that the association of the hoplite reform with the rise of the polis, whether as a prime mover or as the weapon which enabled change, puts the dynamic firmly within the group of *agathoi*. This leads to what we might call a Whig interpretation of Archaic Greek history, placing at centre stage the progress of the middle class, the group Aristotle calls the *mesoi*, towards full political participation. But as Finley points out (1983, 10–11) even Aristotle himself repeatedly allows the *mesoi* to



Fig.59. The earliest known warrior scene in Greek Geometric art: the reverse of a bowl from Eleusis gr.11. Second quarter of the eighth century BC (Eleusis Museum 741. Photograph courtesy of the Museum of Classical Archaeology, Cambridge)

drop out of the picture, and seems to have assumed that they belonged among the rich.

Certainly a hoplite reform *could* account for the coming together of the *agathoi* and the *kakoi*, just as in Livy's account of the dissolution of the barriers between the patricians and plebeians in fourth-century BC Rome the leading part is played by rich plebeians, who take advantage of discontent among the poor to force their way into the highest offices (Livy 6.35; 6.42.9–14; 7.1.1–6). Perhaps the Greek non-governing elite, in using their new military muscle to open up the state, also championed the rights to citizenship of the *kakoi*, even though dependent *kakoi* surely provided most of the extra-familial labour force of the new hoplites, as well as that of the aristocrats whom they are supposed to have challenged. However, for two reasons, I do not think this is what happened. First, while the exact dating varies, modern scholars generally put the hoplite reform between about 675 and 625 BC, substantially later than the changes in behaviour discussed above; and second, there is no evidence whatsoever to support the theory that there was a hoplite reform.

Snodgrass, while accepting that the hoplite reform (in the sense of a widening of the militarily effective body) did happen, argued that the change was gradual, and need not have had the profound political and social consequences others have assumed (1965). But several scholars have recently gone much further, and have suggested that this central element in the hoplite reform theory is a modern mirage.

The hoplite reformists admit that the word *phalanx* appears in Homer (in all, thirty-four times), and that the poems contain numerous references to serried ranks of bronze-clad men, but these (in a totally circular argument) are dismissed as post-eighth-century interpolations, since Homer is assumed *a priori* to be pre-*phalanx* (e.g. Lorimer 1947, 114). In a brilliant study, Latacz (1977) showed that mass formations of infantry are at the heart of the tactical system in the *Iliad*, and he concluded that *there was no hoplite reform*. After a detailed critique of Latacz's work, the foremost expert on Greek warfare concluded:

The fundamental fact remains that the pitched battle was the decisive element, and this interpretation of the Homeric battle is confirmed throughout the entire literature, down to Eustathios. The general impression created by the poems is one of hoplites fighting in mass formation, and this counts for far more than the effort to create an *Ur-Iliad* of pre-hoplite warfare with the deletion of the *sunaspismos* passages.

(Pritchett 1985, 33)

Pritchett suggests that eleventh- to eighth-century Greek warfare was conducted by bodies of massed infantry, as in the contemporary Near East.

Latacz argues that modern commentators have misconstrued the *Iliad* as a series of duels between aristocrats because they have not understood the poet's intentions. He suggests that the words *phalanx* and *stix* are largely synonymous, referring to massed infantry formations (as does Pritchett (1985, 21–5); van Wees (1986) suggests alternative readings, but agrees that mass was decisive in Homeric battles), and that they consistently appear in certain passages – during the gatherings before battles, as the battle begins, in

the similes, and during pursuit after the battle. Fenik (1968) has shown that the battle scenes are built up from repeated 'typical' elements, but the full significance of Homer's compositional technique has to be recognised. As in many contemporary forms of oral poetry (Latacz mentions Russian and Uzbek) attention is directed to individual heroes rather than to the commoners; but Homer's style still further individualises the battle scenes (see also Griffin 1980, 47–8). Homer attempted to create an overall impression of battles extensive in time and space by 'freezing' the struggle at different points, and presenting sequentially the combats of small groups of named heroes. The effect is dazzling but confusing to the modern reader who does not know the poetic conventions. Latacz goes on to show in detail that his approach produces a comprehensible account of the great battle of *Iliad* books 11–18, which had previously baffled academics. He argues that Homer took massed warfare of the phalanx type for granted, and that mass was the decisive force in the battles. Each side strove to break through the *promachoi*, the front line of the bravest and best-equipped soldiers (and in poetry, if not in real life, the noblest-born), just as in Archaic times. Pritchett (1985, 38–9) feels that *promachoi* may have referred to a particular group rather than simply the front rank, but also points out the parallels between Homer and Tyrtæus. He further suggests that the Homeric words for battle seem to support Latacz's interpretation of tactics (1985, 28). The major changes in arms and armour between 750 and 650 BC (Snodgrass 1964) are then to be seen as the development and improvement of the phalanx, not as a discontinuity.

Latacz reconstructs Homer's battles as beginning with an exchange of javelins between the armies (although Leimbach (1980) disagrees on this point), followed by a mass mêlée, and ending with the pursuit and destruction of one force. The weapons known from excavations fit well with this reading of Dark Age warfare. The javelin began to feature very prominently in grave goods around 900 BC, although the heavy thrusting spear of the eleventh and tenth centuries (ideally suited to mass formations with closed ranks) continued to be used. Javelins were still common in the seventh century (Snodgrass 1964, 138–9), but gradually faded out, perhaps as bronze armour became commoner. By the fifth century, there was usually little missile fire in the opening stages of hoplite battles.

Two of the main elements in the 'aristocratic skirmishes' theory of Homeric warfare are the use of chariots and the individual duels between aristocrats as a prelude or an alternative to battle. After a detailed discussion, Latacz shows that the Homeric chariots are in fact used almost entirely for the transport of the wounded, flight and pursuit, in much the same way as the wealthier hoplites may have used their horses in the seventh century (see Greenhalgh 1973, 84–95). Hector's use of a chariot to switch from one wing to the other (*Iliad* 11.527–30) is exceptional, but even here he is partly engaged in pursuit. The similarities between the Homeric and Archaic battlefields are even greater if we accept Greenhalgh's case (1973) that Homer's chariots are in fact just an archaising effect, inserted into the battles in places where in the eighth century horses were used (although Latacz (1977, 219–21) believes chariots were used in the eighth century).

Pritchett reviews the evidence for the institution of the ritualised duel before or instead of the battle in Homer (1985, 15–21). He points out that monomachy was significant in Near Eastern warfare at this time, and continued to have a role in Roman

warfare (it could still occur nearly two millennia later, during the Thirty Years' War). Monomachy was an established practice in the ancient world, and was perfectly consistent with the pitched battle between mass armies.

The implications of Latacz's monograph are enormous: it removes at a stroke the main body of evidence for there having been a 'hoplite reform'. Pritchett's conclusion is worth quoting:

There is no literary evidence for a view which has gained wide currency that there was a change in tactics in the early seventh century from pre-hoplite warfare to hoplite warfare. A technical progress in arms is not synonymous with a new battle formation, and mass fighting cannot be invoked as constituting a change in social relationships.
(Pritchett 1985, 44)

The second set of evidence for a stage of 'pre-hoplite' warfare, the Late Geometric vase paintings, is equally questionable. In her authoritative study of the battle scenes, Gudrun Ahlberg suggests that the painters were using a set of schemata for the representation of mass battles rather than trying to show individual combats. She notes a consistent relationship between the spatial arrangement of the figures and the weapons used, suggesting that even where only two figures appear, the painter intended a mass battle to be assumed (1971, 49–54). Like Latacz, she reconstructs eighth-century battles as beginning with an exchange of missiles, before being settled by close combat between masses of infantry. This is not an argument that the Late Geometric painters were too incompetent to show a phalanx, but rather that the conventions of the time are not immediately recognisable to the modern eye. Snodgrass (1982b) has argued that the Late Geometric painters show a 'synoptic mentality' in their battle scenes, strikingly reminiscent of Latacz's discussion of Homer's technique, collapsing several distinct stages of action into a single picture to create the same sort of idea of an intense mass *mêlée*.

It will no doubt be pointed out that all we have here is an alternative interpretation of the evidence, which is not necessarily superior to the hoplite reform model. That is true, although the parallelism of Ahlberg's and Latacz's cases (which Latacz (1977, 239) insists were argued independently) and their consistency with the archaeological data are striking. And in any case, the boot is surely on the other foot: the proponents of the hoplite reform have to be able to show that there *was* a change in tactics, and at the moment there is not a shred of evidence for this. There is absolutely no reason to associate a 'hoplite class' with either the rise of the polis or the rise of the tyrants. However, I have to disagree with Latacz's claim that the polis ethic is as strong among the Homeric heroes as in the poetry of Archaic times (Latacz 1977, 157). Greenhalgh (1972) offers a more balanced view – the heroes felt some obligations to the community, but these were not the same as the ethos urged by Tyrtaeus.

The composition of oral heroic poetry probably died out quite quickly in Archaic times, although Homer continued to be sung and had a very important part in aristocratic education. But we cannot necessarily assume that the hero disappeared from the literature of the polis because the hoplite drove him from the battlefield: the hero was a

far more complex figure than a simple precursor to the phalangite. The hero was a liminal figure, characterised by the epithet 'god-like' and yet at every turn helping to create the boundary between men and the gods. The hero lived to die violently, and died for *kleos*, fame, through celebration in song. The hero was ambiguous: at once the bulwark of the community, its defender, and yet also outside its rules, a thing of nature rather than of culture, flirting with the eating of raw meat and cannibalism. The hero's position in Homer is fascinating and enormously complex, questioning roles quite as strongly as making them (see J.M. Redfield 1975; Griffin 1980, 81–102; Vernant 1982). His vanishing act after 700 BC is not to be simplified into an epiphenomenon consequent on military changes.

In questioning the role of military developments in the rise of the polis, I come into collision with Aristotle's emphasis on the importance of the evolution of the phalanx (*Politics* 4.1297b16–29; cf. 4.1289b36–40). I make no apologies for this. Even if we pass over his anachronistic use of *dēmokratia* to describe Archaic society, Aristotle's reconstruction still smacks so much of his general philosophical theory that the middle way and the middle class are the ideals that we should perhaps assume it is another case of an unhistorical model without any empirical basis (as John Salmon does (1977, 96)). Certainly the late fifth-century author known as the 'Old Oligarch' assumed a link between the membership of the most important military arm and political participation (1.1.2); but in the absence of any empirical indications of a hoplite reform in the eighth or seventh centuries, the internal logic of Aristotle's argument is not very important.

In another attempt to place the forces for change within the group of *agathoi*, Ed. Will assumed that Hesiod's grumblings about the *basileis* were those of a proto-revolutionary railing about exclusion from power, and tried to see a situation of mounting discontent and debt bondage in seventh-century Boeotia (1957; followed by Detienne (1963, 15–27)). But as many historians have commented, there is nothing to suggest that either Hesiod or Perses was in debt to the *basileis*, and indeed the words for debt occur only rarely in the *Works and Days*. I return to the original argument: the 'revolutionaries' of the early polis were the *kakoi*, the *dmōes* of Hesiod's poem.

One problem with the archaeological evidence is that it is better suited to showing the results of structural change than its workings or causes. Haas (1981; 1982, 86–192) suggested several ways to identify 'class struggle' in the archaeological record, but these all seem either ambiguous or irrelevant. As an alternative, we might try to identify changes through time in diet, rather than contrasts within a frozen system as in Haas' test: did the subsistence level of the mass of the people decline immediately before the appearance of the polis, and did it improve afterwards? These are certainly important questions which archaeologists will have to ask, but we should be cautious about the reduction of the rise of the polis, and particularly our evaluation of this process, to a question of calorific intake.

As an illuminating parallel case, we might take the 'standard-of-living controversy', a furious debate among economic historians in the 1950s over whether the living standards of the bulk of the English people rose or fell between 1780 and 1850, during the onset of the industrial revolution. The 'optimists' and the 'pessimists' argued over the abundant but patchy evidence for wage and price series at a level of detail impossible for

Archaic Greece, without reaching any conclusions acceptable to rival observers. But the problem was insoluble: standard-of-life and way-of-life are not always the same. We may measure the former as a quantity, but can only understand the latter as a quality. Thompson's conclusion neatly reveals the difficulty:

It is at times as if statisticians have been arguing: 'the indices reveal an increased *per capita* consumption of tea, sugar, meat and soap, *therefore* the working class was happier', while social historians have replied: 'literary sources say that the people were unhappy, *therefore* their standard-of-living must have deteriorated.' . . . It is quite possible for statistical averages and human experiences to run in opposite directions. . . . By 1840 most people were 'better off' than their forerunners had been fifty years before, but they had suffered this slight improvement as a catastrophic experience.
(E.P. Thompson 1980, 230–1)

I do not intend to retreat into a Daltonian relativist position, where exploitation is only that which is recognised as such within the social system, but there is a genuine problem with archaeological approaches to class. The new ritual structures of the polis suggest that the kakoi probably on the whole felt themselves to be better off after 750 than before, and the fact of the eventual emergence of the slave society by the sixth century surely does point to both material and psychological gains for the kakoi, at least in some parts of Greece. I stand by my 'optimistic' view of the eighth-century transformation, and by the opinion that explanation and evaluation of the polis cannot be separated.

We quickly run up against the limits of what is possible with the evidence available, and only comparative work will allow further advances. In one sense there is no shortage of comparanda, in that rural strife between the elite and peasants is common enough. However, what is being suggested for eighth-century Greece goes far beyond unrest or rebellion. Peasant revolts generally have limited goals and tend to be brief, bloody but ultimately ineffectual (Wolf 1966a, 106–8; Landsberger 1974, 28–37). The coming together of the agathoi and the kakoi, the rise of the polis, was a *social revolution* – a 'rapid, basic transformation of a society's state and class structures, accompanied and in part carried through by class-based revolts from below' (Skocpol 1979, 33).

It is important to realise how very rare social revolutions have been in recent history. Primitive rebellion is perhaps endemic in agrarian society, but has very little potential for leading to structural change (see Hobsbawm 1959).

Theda Skocpol has argued that social revolutions must be understood within a structural perspective, focusing on class relationships, relationships of the elite to the state machinery, and relationships between states. She stresses the difficulties of making non-trivial generalisations appropriate to all cases (1979, 288–90), pointing out in particular that modern anti-imperialist revolutions are very different from the French, Russian and Chinese cases which she analyses in detail. Eighth-century Greece is different again, in that we are dealing not with a crisis in an established 'old-regime' imperial state with a proto-bureaucracy, but with a situation where social revolution seems to accompany

the very process of centralisation. Nevertheless, certain general features of Skocpol's framework will be appropriate.

Skocpol argues that none of the main-stream sociological 'explanations' of revolution (in particular, relative deprivation, legitimation crises, and pluralist competition) or the standard Marxian stress solely on class conflict adequately accounts for what actually happens in social revolutions. First, international military and economic pressures bring about a crisis within the existing state system, and these problems both contribute to and weaken the elite's power to resist widespread peasant revolts. Peasant rebellion was always common in French, Russian and Chinese history; what was new was not the aims of the peasants, which remained essentially traditional, but the inability of the state to defend dominant class interests.

Skocpol argues that the analysis of social revolution must begin with detailed study of agrarian structures (1979, 112–17). Obviously, such evidence is absent for eighth-century Greece. Cartledge (1985) presents an excellent account of the ideological and institutional nexuses of slaves and Spartan serfs in the fifth and fourth centuries, and it does seem that the serfs' greater rebelliousness was closely linked to many of the factors Skocpol identifies as important in the origins of social revolution. The important differences between Greece and Skocpol's cases must not be forgotten, but I think it is legitimate to suggest at least a very crude model of what may have been going on.

We must first try to locate the rise of the polis in an 'international' framework, although it will not be possible to establish a causal chain between any particular factors. As noted in Chapter 9, there is evidence for population growth, larger settlements and perhaps greater political centralisation all around the Mediterranean from c.900 BC onwards. In a very important paper, Bjørn Qviller (1981) has suggested that the Dark Age political system collapsed because population growth initiated an escalating spiral of competitive gift exchange, as *basileis* tried to attract and to maintain ever-larger groups of warrior companions through feasting and presentations. The struggle created too much stress for the political system to control, and the *basileis* had to surrender their powers.

The sort of model will be familiar to European prehistorians through Frankenstein and Rowlands' (1978) study of south-west Germany in the Hallstatt D period. Both papers draw heavily on Friedman's reinterpretation of Leach's work among the Kachin. Frankenstein and Rowlands suggested that the German chiefs of the sixth and fifth centuries BC built up political networks through gift-giving, and that they depended heavily on prestige items imported from the Mediterranean world. The over-extension of the system and problems in supply eventually caused a collapse, with a new system appearing in the La Tène period. There is certainly nothing to suggest that eighth-century Greece should be seen as a peripheral area in a world system, but the links between the Aegean and the Near East are worth exploring. In the ninth and eighth centuries the Assyrians imposed their empire on the Levant, which must have had repercussions in the Greek world. Perhaps these were limited to inspiring emulation of Assyrian magnificence and military prowess, but some connection with Qviller's suggested growth in competition between the *agathoi* seems quite possible. A third factor

is warfare within Greece; evidence increases from the late eighth century onwards, and military defeats coupled with pressure on traditional prestige networks would make a very plausible background for the destabilisation of the power base of the agathoi within some Geometric communities. However, plausibility is the most that can be achieved; even Qviller's arguments for greater competition within the agathoi cannot be archaeologically tested, in that most gifts probably circulated as wedding offerings or in guest-friendship situations. We should be cautious in deploying any of these *post hoc ergo propter hoc* reconstructions.

It seems best to suggest that for a reason or reasons now unknown, the agathoi became more divided and less cohesive in their control of the kakoi in the eighth century. This would have acted back on the normal situation of rural unrest to increase its extent and ferocity, ultimately transforming it into a revolution. Finley suggested that the sheer scale of dependency in early Greece may have caused its rejection (1981b, 165). I have argued that a large proportion of the population were dependents for some three centuries prior to the rise of the polis; we should not turn exploitation, a constant feature of the peasant condition, into an explanatory variable (Skocpol 1979, 115). The crisis of the Dark Age political system would in this model be accompanied by widespread revolt of the kakoi against the whole landlord class, as in France, Russia and China.

Those societies where social revolutions were carried through by the kakoi became poleis in the eighth century or later; those where no such developments occurred became ethnē, still centralised states, but looser and without the citizenship basis of the poleis. We might look at the ethnē as a more complex version of the Dark Age community. It is interesting to ask why some states were poleis and others were ethnē; the polis-areas were not directly related to the areas of urban life or to the preceding areas of the main Mycenaean culture, and the polis/ethnē distinction seems not to be geographically determined (Snodgrass 1980, 42–7). Right through the Dark Age, we can distinguish between 'advanced' and 'backward' areas in Greece; by and large, the advanced areas went on to become poleis (Snodgrass 1971, 374–6). The differences between the polis and ethnē areas perhaps go back to the eleventh century, and will surely repay further research.

Although the polis can be analysed only within a Mediterranean context, we must not lose sight of its special features. Champion *et al.* have laid the foundation for an understanding of the processes at work, although their blanket judgement on the rise of the state in the eighth to sixth centuries in the Mediterranean area, that 'the state was, therefore, a means of increasing and perpetuating aristocratic control over society, and was also an efficient means of mobilizing the people' (1984, 266), cannot be accepted. We should not submerge the particular in the general. There can be no doubt but that the institutions of the polis or the ethnē allowed the nobility greater powers than they had had before, but seeing the polis merely as an ideology masking still greater exploitation is surely naive.

I do not think that the argument can be taken any further at present; perhaps it has already been taken too far. I have argued that the rise of the polis was a social revolution, which was able to come about because of a crisis within the ranks of the Dark Age agathoi. The driving force was however the relationship between the agathoi and the

kakoi. The particular forces which led to the changes remain obscure, but they must have been powerful indeed; and the changes themselves, and the polis they created, have to be seen as improvements in the way of life of the kakoi. *Isegoria* and *isonomia*, best translated as 'equality through speech' and 'equality through the law', were more than empty words in the polis.

Archaic Attica

As we have seen, social revolution and the rise of the polis were not the only possible courses of action in the eighth century. The Spartans tried another route, creating a new serf class through the conquest of the Messenians, at the same time reinforcing their Laconian system of dependency, and several Greek colonies reduced the native populations to bondsmen. The Thessalians clung on to the old system, although their serfs were notorious for their rebelliousness (e.g. Aristotle, *Politics* 2.1269a37–9). Many of the Cretan cities combined a rather extreme form of some polis institutions with large-scale serfdom.

Austin and Vidal-Naquet have drawn a useful distinction between 'modern' and 'archaic' states in the seventh century (1977, 80). The modern state, a category within which I would place Corinth and Argos, was in all cases a polis; the 'archaic' could have some polis features or could be an ethnos, the essential criteria being the definitions of the notions of citizen, free man and slave. The modern poleis were those which evolved from the Dark Age system to slave society.

Perhaps a third type can be added to this classification: a 'reactionary' state. I argued above that Athens belonged to a large group of communities in the Aegean who were undergoing profound social and economic changes around 750 BC, culminating in the emergence of the polis ideal. But from the discussion in Chapters 4–8 it should be clear that I wish to suggest that c.700 BC the Athenian elite was able to overcome the new social structure and instituted a relationship between the agathoi and the kakoi similar in its ritual expression to that of the Dark Age. As many bitter experiences have shown, structural revolution is not a one-way street.

Later authors, often drawing on Solon's poems, describe a situation in the seventh century where the population was rigidly stratified into two classes, the rich owning all the land, and the poor enslaved to them, working their fields (*Constitution of Athens* 2.2; Plutarch, *Solon* 13.4–5). Our sources seem confused, but it is likely that in the seventh century there was a large serf population in Attica, and that Solon tried to change this. The literature on the Solonian question is vast, but two main lines of thought can be disentangled. The first is that free smallholders of the Dark Age were gradually worn down to a class of serfs. Some see this as a result of degradation of the soil through intensive agriculture, declining output, and a growth in debt bondage (e.g. French 1956); others suggest that the nobles expropriated the free peasants' surplus labour, either through the unlawful occupation of temple lands (Cassola 1964), or as part of an 'internal colonisation' in Attica (e.g. Bintliff 1982; Gallant 1982).

The second view is that dependent labour is a normal feature of archaic societies, and that Solon tried to create, rather than to recreate, a polis society of small freeholders (e.g. Finley 1981b, 150–66; Garlan 1980). Both Aristotle and Plutarch place debt at the

centre of the crisis, but neither explicitly identifies the *hektēmoroi*, the main group of dependents, as debtors, and the word for debt never appears in Solon's poems. Debt is certainly a very common cause of peasant unrest, and as Mossé points out (1979, 96, n.22), Solon's terms are often very obscure; but seeing the *hektēmoroi* purely as individual debt-bondsmen creates too many problems (Rhodes 1981, 93–4). Debt and default probably exacerbated rather than created the position of the *hektēmoroi*, and Solon was concerned both to abolish dependence and to cancel the debts which presumably contributed to the crisis around 600 BC.

From the archaeological evidence it would seem that Solon was not just facing a problem of creating or restoring a free citizenry. He had to cope with a situation produced by a series of great changes beginning back in the eighth century. As at Corinth and Argos, the polis ideal had been embraced at Athens around 750 BC, but there were many possible lines of development, and by the third generation the Athenians had changed direction. This does not make the situation in the seventh century a direct continuation of the Dark Age *agathos/kakos* relationship. The word *hektēmoros* itself may have been a recent invention (Lévêque 1979, 117), but even if it goes back to the establishment of Dark Age serfdom in the eleventh century, the status of the group must have changed in the great upheavals of the eighth century.

It is of course possible that the change in social structure around 750 did not affect the *agathos/kakos* relationships as it actually took place in social organisation, in everyday life. Indeed, the shackles of serfdom may have continued to hang onto citizenries well into the Archaic period. Dependent labour of course remained economically important throughout antiquity, and the first evidence for slave society does not appear until the sixth century.

But whether or not the actual position of the Attic *kakoi* changed after 750, about 700 the very idea of citizenry was defeated at Athens, for reasons now unrecoverable. My argument thus differs from those of Finley and Garland as well as those of Cassola and Gallant; Athens began to develop as a polis system, but then reverted to a pre-political relationship within the community after 700 BC.

Aristotle announces 'all the land belonged to a few' (*Constitution of Athens* 2.2), which is of course what we might infer from the reappearance of restrictions on formal burial. Following the arguments of Chapters 2 and 3, we might interpret the lack of evidence for competition in the grave markers of 700–650 BC as a result of the establishment of a closed group of *agathoi*. I suggested in Chapter 6 that the *agathoi* probably comprised one quarter to one half of the adult population; Aristotle says 'the poor, not only themselves but also their children and their wives, were enslaved (*edouleuon*) to the rich', and Plutarch that the people were under obligation (*hypochreōs*) to the wealthy (*Solon* 13.4), but it was not only the narrow nobility of *eupatridai* who owned the land and exploited the serfs. A considerable body of rich peasantry must have existed too, doubtless dependent in many ways on the *eupatridai*, just as Hesiod had been dependent on the *basileis*; but the fundamental class division of the seventh-century society was between this whole group of *agathoi* and the *kakoi*.

The argument that the burials are those of the *agathoi* only, and that Archaic Attica was a pre-political society, is also consistent with Solon's claim to have freed the dark

earth which had been enslaved, removing the fixed marker stones (West 1972, fr. 36.5–7). Aristotle's claim, based on Solon's poetry, that the land was not redistributed (*Constitution of Athens* 11.2) is no argument against this; Solon is quoted as having written in reply to the demands of the kakoi 'nor that the best men (*esthloi*) and the kakoi should have equal shares in the earth of the fatherland' (West 1972, fr. 34). What Solon seems to be saying is that he did not try to divide Attica into equal sized plots, as the legendary lawgiver Lycurgus is supposed to have done in Sparta.

Sakellariou (1979, 103–5) argued that Solon's fragment 36 (West 1972) did not refer to the lands of the *hektēmoroi*, mainly because Pollux, writing in the second century AD, said that their land was mortgaged (*epimortē*), and was therefore owned by them (Pollux 7.151). This seems to add unnecessary confusion based only on very late sources, and supposes that *epimortē* had the same meaning in the seventh century as it did later, in a world with completely different systems of land tenure and law.

The archaeological and literary sources seem to combine in support of the view that the *hektēmoroi* were serfs, working on the land owned by the agathoi; and that in freeing this land for them, Solon at least created a situation where there was a chance for the *hektēmoroi* to turn into free citizens.

The Solonian crisis must not simply be regarded as a re-run of the eighth-century social revolutions, but a similar broad framework of analysis will be applicable. Many historians since Fustel (1980 [1864], 253–7) have seen the causes of the crisis in a sort of relative deprivation, with the status of *hektēmoros* no longer being an acceptable one by 600 BC. Although all societies produce widespread relative deprivation of one form or another, hektemorage is likely to have been a most unpopular institution in the seventh century, and one which was perhaps difficult to legitimise. Alternative social structures based on citizenship existed not only in contemporary poleis, but even in Athens herself in the recent past. Comparing the Cretan serfs with the Spartan helots in the fourth century, Aristotle noted that the former never revolted because Crete was so isolated from foreign ideas (*Politics* 2.1272b18–23). Hektemorage was probably an inherently unstable institution, but this alone does not explain why the *eupatridai* appointed Solon as a mediator in 594.

Late seventh-century Attica seems to be a fine example of the breakdown of a political system turning widespread rural unrest into a potential social revolution. The Athenians had recently been defeated in war by Megara, perhaps by Mytilene, and just possibly by Aegina. The fertile island of Salamis had been lost to Megara, and Solon makes it clear that this was a source of great shame for the Athenians (West 1972, frs. 2, 3). The Megarians had even interfered in the Athenians' own internecine strife by supporting the Cylonian coup, and the burial practices suggest increasing competition among the agathoi. But this time the Athenian governing elite did not allow the storm to break. Solon is said to have recaptured Salamis (Plutarch, *Solon* 9), and he was then able to forestall what he presents in his poems as the imminent collapse of the state by making concessions to the kakoi without meeting their full demands. Of course, all our sources for Athens around 600 BC are very poor, and most of the incidents mentioned in this paragraph have been queried by modern scholars at one time or another, but the pattern is certainly consistent with Skocpol's outline of the path to social revolution. The con-

trollers of the Athenian state, perhaps fortified by the knowledge of what had happened in their grandfathers' time, took action before the final collapse came.

It was noted in Chapters 4–8 that no very fundamental change can be seen in the cemeteries immediately after 600 BC. Like Plutarch's prophetic character Anacharsis (*Solon* 5), we may doubt whether a social relationship like serfdom could be changed at a blow by Solon's legislation. The stories in the *Constitution of Athens* (12.3–13.5) suggest that the class opposition in Attica was not ended by Solon, and the groups of 'the plain', 'the shore' and 'the hill' involved in the strife of 580–560 BC (Herodotus 1.59; Aristotle, *Constitution of Athens* 13.4; *Politics* 5.1305a22–4) were also mentioned by Plutarch (*Solon* 13) in connection with the seventh-century crisis, although the most likely explanation is that he simply confused the chronology. Mossé (1964) and Lévêque (1978) have argued that Solon did not influence the class divisions in Attica, but their case rests partly on the curious tale of the ten archons of 580 BC (*Constitution of Athens* 13.2). Aristotle says five of these were nobles (*eupatridai*), three were 'farmers' (*agroikoi*), and two were *dēmiourgoi* – a difficult word, used at some times to mean artisans, and at other times as the title for a particular magistracy. Mossé (1964, 408) took this as evidence for a large proletariat, but this is highly improbable. There is in any case rests partly on the curious tale of the ten archons of 580 BC (*Constitution of Athens* late fifth century (Rhodes 1981, 183).

Should we assume that serfdom was the dominant relationship in Attic society until the late sixth century? A case can be made, but on the whole it seems improbable. Peisistratos is said to have levied a tax of 5% (Thucydides 6.54.5) or 10% (*Constitution of Athens* 16.4) on the land, which might be treated as similar to the one-sixth of the fruits of their labour which the *hektēmoroi* had to render, but the story is of rather dubious value, and other traditions that Peisistratos widened the citizen body and encouraged smallholders seem to point in a different direction.

The fact remains that the burial evidence changes to the pattern familiar from Classical Athens only at the very end of the sixth century. Yet given the extant traditions about Peisistratos' rule, this is not wholly surprising. Aristotle said that Peisistratos belonged to the class of 'half-wicked' tyrants, who dealt diplomatically with the nobles, preserving appearances, while secretly concentrating power in his own hands (*Politics* 5.1314a30–1315b10; also *Constitution of Athens* 16.9; Herodotus 1.59.6; Thucydides 6.54.6). As well as communalising building programmes (perhaps misconstrued by Aristotle in *Politics* 5.1313b24 ?), the Peisistratids allowed the aristocracy freedom of a sort; we should note in particular Hippias' choice of Cleisthenes and Miltiades as archons in 525–523 BC. Peisistratos was judged by Aristotle to have been 'most favourable to the people' (*Constitution of Athens* 14.1; cf. 16.8), and during his reign great changes took place, particularly in the centralisation of the Attic state organs. The burial evidence shows some widening of the group c.550–525 BC, but the establishment of 'citizen cemeteries' can be placed only around 510 BC. I would suggest, then, that the ties of serfdom were broken after Solon, but that the social structure based on a relationship of dependency faded away only slowly, and that the tyrants made no attempt to interfere in this. Non-slave labour was probably more important than slavery in Attica until well

into the sixth century (Mossé 1982), but this was probably not the main factor; as noted in the discussions of Corinth and Argos, constitutional forms came and went, but patterns of funerary behaviour emanated from a deeper level. Social structure may have changed more slowly than social organisation, as when Hodder wrote of the modern Nuba:

Despite, or perhaps because of . . . changes involving different social relations and different patterns of land ownership, the burial pattern remains unchanged to form a certain stability and to act as a key for co-operation and continuity in labour and settlement.
(Hodder 1982a, 198)

This argument may also allow us to explain why Cleisthenes' total transformation of the polity in 508/7 BC was apparently so successful: what he did was to redraw the lines of the community so that it was no longer in contrast with the practicalities of the relationships within the state: he substituted citizenship for dependency in the ideology of power.

According to the sources, Cleisthenes managed to equate society with the state by bringing in the mass of the people, who had previously been excluded. Herodotus says 'he made the people into his companions' (5.66: *ton dēmon prosetairizetai*), and Aristotle that 'he gave the *politeia* to the masses' (*Constitution of Athens* 20.1; Rhodes (1981, 244) notes that this is not derived from Herodotus). The coincidence of this poorly understood reform with the archaeological evidence for the sudden widening of the burial group is compelling. Cleisthenes established the democratic polis, reorganising the tribal system and mixing the people together so that they could control the state (Aristotle, *Constitution of Athens* 21.1; *Politics* 6.1319b20–3). In a troublesome passage, Aristotle says Cleisthenes also enrolled many *new* citizens (*Politics* 3.1275b34–7). No satisfactory interpretation has yet been made of this. Oliver's extensive changes to the text (1960) are unacceptable (see Kagan 1963), nor do they receive any support from Baba's claim (1984) to have found epigraphical evidence for Cleisthenes' creation of the resident-alien status. Aristotle's statement might make sense if he knew that Cleisthenes had opened up the citizenship, as the funerary record indicates, but misunderstanding the nature of the enfranchisement had himself made a rationalisation and supplied the phrase 'he enrolled many aliens and co-resident slaves'. There is also Hignett's suggestion that the latter were 'serfs who had become metics' (1952, 133), a translation which would tie in with the end of a more archaic social structure, but lacks a solid basis in the text. The support provided by *Constitution of Athens* 21.4, that Cleisthenes made *neopolitai* ('new citizens': Kagan 1963, 44), makes it seem probable that there *was* an enfranchisement at this time, just as the burying group expanded. The *Constitution of Athens* of course may have taken this story directly from the *Politics*, but the idea is consistent with Herodotus' picture.

The sources are in agreement that Cleisthenes founded the democracy (Herodotus 6.131; *Constitution of Athens* 22.1) and his reforms were likened to the establishment of a new state (*Politics* 6.1319b20–3). The old view that Cleisthenes replaced a tribal kinship order with a civic society is untenable (Roussel 1976, 269–84); he acted in ways

established by sixth-century precedent (Herodotus 5.67) and current political and philosophical thought, rather than grasping out of thin air a wholly new idea of the state and society (see the discussion of *isonomia* in Ostwald 1969, 137–73). It seems that Cleisthenes' conception had a powerful spatial expression, with the unified citizen state centred on the town of Athens, totally integrated with the Attic countryside (we might recall de Polignac's statements on the 'monocentric' Attica). The organisation of civic space always has an important, if complex, role in the generation of structures of social discourse, and we might also note that much of the public area of Athens was remodelled at this time (Lévêque and Vidal-Naquet 1964, 18–22). The reorganisation of the citizen cemeteries around 510 BC was perhaps a significant part in this spatial expression of the polis. The cemeteries, powerful symbols of descent and citizenship in the fifth and fourth centuries, must have spoken strongly in the new order.

Particularly if the social structure of the mid-sixth century had been at odds with the actual relationships between groups within the state, the sudden change in the membership and expression of the burying group c.510 accords perfectly with the spirit of the new Athenian polis – the *isēgoriē*, 'freedom through speech', which Herodotus says was behind the Athenians' twin victories over Chalcis and the Boeotians on a single day in 506 BC (Herodotus 5.78). Cleisthenes' legislation should be seen as bringing the constitution, and through it the social structure created and expressed in the funerary behaviour, into line with the mood of the day.

In this chapter, I have tried to show that the archaeological evidence for burial can help us understand the rise of the polis. I argued that this was a total transformation of society and the state, creating entirely new relationships and categories which can be observed in the material remains. Social revolution and the rise of new structures of thought are intimately tied together in a complex web. Further, it was suggested that these processes can be understood only through a broad comparative approach. Vernant and Gernet have tried one such line, in a fruitful joint study of Greece and China (in Vernant 1980, 71–91); an even more profitable project might be a wide-ranging archaeological and textual analysis of the Near East and Mediterranean Europe in the Late Bronze Age and Early Iron Age. It might also be possible to generalise from the Archaic Greek case to help in the study of archaeological sequences suggesting major structural change in other parts of the world. Skocpol rightly stresses that full-blown social revolutions are rare happenings (1979, 5, 33); if we can use archaeological evidence to augment the literary record and to improve our understanding of rapid social change in archaic states, we should make every effort to do so, although it can hardly be denied that the material remains alone may have only a very limited usefulness. This problem will be considered more fully in the next chapter.

Conclusion

So many burials, reader, in one book
Warn thee, that one day, thou for death must look.
John Weever in a 1631 book of epitaphs (quoted in Gittings 1984, 17)

The archaeology of death

Death is universal, but human responses to it are as diverse as culture itself. Funerary practices belong to particular, living, complex social systems, and can only be understood as parts of these wholes. In this book I have tried to place Early Iron Age Greek burial customs in their context and to use them to understand the evolution of a specific ideal of the structure of society, the polis.

I argued in Chapter 2 that funerary evidence should be approached as the material remains of structure-creating ritual practices. The functions and symbols of ritual provide a fertile and highly complex area of study: the structures evoked in ceremonial action are rarely wholly explicit, can never be the same for any two participants, and may be only very subtly related to the terms in which members of the community live out their lives. The archaeologist cannot hope to parallel the precision and intricacy of contemporary anthropological studies of ritual; the coarse grain of the evidence means that the picture will begin to break up if we approach it too closely. However, the archaeological record is often the only direct testimony to ancient ceremonies and social structures, and we must learn to use it in the most fruitful way possible. While the archaeologist is inevitably parasitic on anthropology and history when building models of interpretation, the material evidence has the great virtue of allowing researchers to take in vast sweeps of time and space. Archaeology might make an important contribution to ritual studies through its practitioners' ability to observe long-term change in a way impossible for anthropologists, who are generally restricted to an 'ethnographic present', and to study the developing structures of the practices of the whole social group, while the texts used by historians are very often limited to the behaviour of only a small proportion of the community.

Perhaps the greatest problems archaeologists face are (1) that the burial evidence forms only a part of the ancient ritual practices which they wish to study and to interpret, and (2) that the meanings evoked in the ceremonies are lost forever. We might partly compensate for the second problem by comparing changes in burials through time and space, but only at the expense of aggravating the first. There is nothing in the archaeological data themselves which speaks to us: they must be questioned and interpreted through analogy. The most reliable analogical sources for the interpretation of

the burial remains, primary verbal testimony or pictorial representations, are usually denied to prehistorians, who must therefore be careful to formulate less direct relational analogies which can be shown to be relevant to the particular case in hand (Hodder 1982b). I suggested in Chapter 2 that as long as analysis is kept at a certain level of abstraction, archaeologists can seek lines between the material remains of burials, the funerary ceremonies, and changes in the structures of the societies which produced them: but when closer studies of the detailed empirical patterning of the funerary record are attempted, cross-cultural generalisations will inevitably fail. In this study of early Greece I was able to use literary evidence to support the argument that the magnificence of a burial was normally judged to be a statement about status, and that the symbolism was probably fairly consistently archaeologically visible across the six centuries under study (Chapter 3 above). Most prehistorians are not in such a fortunate position. Attempts to interpret changes in early funerary behaviour therefore inevitably rely to some extent on leaps of faith and analogies which are anything but direct. For example, the archaeologist cannot know whether a decline in consumption in burials comes from a levelling ideology or from a change to giving gifts to the living rather than to the dead in the funeral; or even from a change to using perishable items as grave goods.

I am not by any means suggesting that prehistoric burial studies are theoretically bankrupt, but it does seem to me that some researchers are rather sanguine about the potential of the material remains themselves. Pader, noting that the burial need not always be the central part of a funerary ceremony, suggests that

an argument can also be set forth which states that as burial is indeed an integral part of the ritual, and therefore consists of largely non-random behaviour which makes sense in terms of what came before and what comes afterwards, it is a viable unit of study.
(Pader 1982, 42)

The argument can certainly be made, and will often be valid, but we should not lose sight of the fact that it involves us in making a range of assumptions which a rival observer need not accept. It is a probabilistic rather than a universal generalisation, and as such can never be shown to hold in a particular case.

While this is a major challenge for the prehistorian, it is not a criticism which undermines all attempts to understand structure from the archaeological record. The assumptions which must be made can often be shown to have a high probability of relevance, and placing burials in the context of settlement and other ritual evidence, where this is available, can provide an essential and revealing context.

Archaeologists and history

I have been suggesting that there are strict limits to the inferences which prehistoric archaeologists can legitimately draw from burials, but these limits are generally on the level of analysis which is possible, rather than on the areas of the extinct cultural system which can be studied. There need be no return to the 'hierarchy of inference' (Hawkes 1954). This book is not intended as another 'cautionary tale' for prehistorians, nor as an

attempt to use the literary sources to refine the testing of law-like propositions about human behaviour, which some archaeologists see as the main role for textual evidence (e.g. South 1977). Archaeologists and historians interested in problems which parallel those of early Greece might find this a useful case study, but my main aim has been to employ every type of relevant evidence to understand a particular and historically important process. Some of the methods I have used to analyse the burials will of course be applicable elsewhere, and indeed many have been borrowed from archaeologists dealing with other times and other places, but the particular interpretations of the archaeological record made in Chapter 10 are unlikely to be relevant outside the unique historical context of early Greece. This is not a retreat towards the traditional superiority complex of the Classicist – ‘the Greeks aren’t like the others’ – nor is it a rejection of generalisation, but a necessary statement of archaeological and historical practice.

I have also hoped to show how archaeologists concerned to understand culture change will find models derived from historians’ works every bit as useful as those drawn from ethnology, even given the contrast between most literate societies and the small-scale groups studied by many archaeologists. The unity of history and archaeology has recently been reasserted within the British critique of the New Archaeology (e.g. Hodder 1982c), but there still seems to be a real failure in communications. Many archaeologists, through lack of familiarity with historical scholarship, have misunderstood the structure of the historical record and historians’ aims and methods, thereby creating a false dichotomy between ‘process’ and ‘history’ (see the discussions in Trigger 1978; Hodder 1984). Many of the general questions which archaeologists are interested in, and above all the nature of major social change, have been extensively explored by historians, and their writings will be of enormous interest.

The supposed contrast between archaeology and history has been made most explicit by Lewis Binford, and I will therefore concentrate on his discussions, taking Binford as the spokesman for a large body of opinion among archaeologists. This is not to be read as a general attack on Binford’s approach to the study of the past; his contribution to prehistoric archaeology has been greater than that of any other scholar, and a consideration of his assumptions should therefore have all the more force.

Binford argues that the ‘historical record’ – ‘chronicles, letters, diaries, or any other sort of literary record of the past which was purposefully produced by one person to transmit information to another’ (1983, 20) – differs qualitatively from the archaeological record. Archaeologists are not, and cannot be, historians. Archaeology, he suggests, should use the techniques of the natural sciences, the only other disciplines which seek to explain the dynamics behind a static evidence base. His view is widely shared (e.g. Clarke 1978, 10–13).

Binford implies that historians relate to their evidence in much the same way as the ‘traditional’ archaeologists whom he lampoons so fiercely – ‘thousands of pictures of pot sherds . . . spoke to Griffin, and if you were lucky you too could have access to the data which screamed forth self-evident truths about the past’ (Binford 1972, 5). For Binford, like Popper, the sources only ‘tell’ historians about things which their creators felt were

interesting enough to record, and historical knowledge is therefore its own artefact. He seems to assume that historical practice consists of ascertaining that the texts are not forgeries, and then empathising with them (1982; 1983, 21).

But as I argued in Chapter 3, this is not how (good) historians relate to textual evidence. Much of a practising historian's data base will have been intended to communicate little information, if any; and in the vast majority of cases, the historian poses questions which the texts were not created to answer. Thompson, as usual, puts it well:

The historical evidence is there, in its primary form, not to disclose its own meaning, but to be interrogated by minds trained in a discipline of attentive disbelief . . . a discipline developed precisely to detect any attempt at arbitrary manipulation: the facts will disclose nothing of their own accord, the historian must work them hard to enable them to find their own voices. . . . They cannot 'speak' until they have been 'asked'.
(E.P. Thompson 1978b, 28–31)

All this is obvious enough to the working historian, but most New Archaeologists seem to have had little exposure to proper historical practice. Historians, just like archaeologists, face a static physical record of past dynamics, and seek to formulate questions of present interest which the data can be forced to answer – that is, they write history. There is no necessary epistemological gap between archaeology and history.

The methods of interrogation differ according to the nature of the sources, but the aims are the same. Even Binford's demands that archaeologists adopt rigorous and logical argumentation (surely one of his greatest contributions to the field) have been paralleled by historians (e.g. McCullagh 1984).

The tendency to separate 'history' (kings, battles, wars) and 'process' (social and economic trends) has led to futile arguments between archaeologists as to which of the two is prior. Both are inextricably mixed as the flow of historical eventuation; the 'process' of the New Archaeologists is the central field of study of historians. The concern with generalisation from particular cases is widely shared by historians (e.g. Skocpol 1979; Fredrickson 1980). Some archaeologists seem to assume that Collingwood's claim that historians can study only the unique (1946, 250) actually applies to what practising historians do; this is not the case. Similarly, many historians share the archaeologists' interests in ecological factors. As an example, we might take the famous and highly influential *Annales* school of French historians, who were centrally concerned with man-environment relationships. Fernand Braudel's mighty work *La Méditerranée et le monde méditerranéen à l'époque de Philippe II* (1949; English translation 1972) is one of the greatest achievements of modern historical writing. In it, Braudel analysed sixteenth-century history at three levels – the almost stationary workings of geology, geography and climate; the long-term processes of institutional change (*la moyenne durée*); and the more ephemeral level of political and military events, which he called *l'histoire événementielle*. He stressed the determining force of the environment, while the area of the greatest substantive interest historically was *la moyenne durée*,

Binford's 'process' (Braudel 1958; 1972; Hexter 1972). Social and economic processes are the normal subjects of modern historical research (Iggers 1984; Kammen (ed.) 1980). Freeman, a nineteenth-century Regius professor of history at Oxford, made the pithy remark 'history is past politics, and politics is present history', but in practice this has never been true. Even in the heyday of von Ranke, when archival material dominated research to an unprecedented degree, many historians stuck to the earlier holistic and structural concerns of the Göttingen school; and by 1900, the theoretical assumptions and narrow political ideologies of the Rankean hermeneutic school were collapsing (Marwick 1970, 50–87; Iggers 1984, 3–42).

There has been something of an increase in the last few years in archaeologists' citations of historiographical works, but if anything this only highlights the continuing gap between the two groups of scholars. The references are largely limited to Collingwood, occasionally spiced up with a mention of E.H. Carr. Collingwood was one of the great thinkers of the twentieth century, but *The idea of history* is a very unusual text:

Everyone interested in history should know something of Collingwood's ideas. But it must be stressed again that he does not stand in the mainstream of historical studies: full of deep insights, he is no sure guide to what historians actually do or how they think.
(Marwick 1970, 81)

Binford's condemnation of the papers in *Ranking, resource and exchange* as 'historical' illustrates the continuing gap between archaeologists and historians. 'Historical' turns out to mean Collingwoodesque re-enactment of past thoughts. Quoting Collingwood twice and at some length, Binford attacked the articles for uniformitarian assumptions about a constant human mentality (1982, 161–2). As noted above, the Collingwood tradition is hardly a guide to 'historical' approaches; and in fact Collingwood was at some pains to repudiate Kantian notions of an unchanging human nature (1946, 205–7; see Saari 1984, 16; Martin 1977). Collingwood did not make such uniformitarian assumptions, and as a result took an extreme relativist position very different from the various stances of the contributors to *Ranking, resource and exchange*.

St. Augustine looked at Roman history from the point of view of an early Christian; Tillemont, from that of a seventeenth-century Frenchman; Gibbon, from that of an eighteenth-century Englishman; Mommsen, from that of a nineteenth-century German. There is no point in asking which was the right point of view. Each was the only one possible for the man who adopted it. . . . Every present has a past of its own, and any imaginative reconstruction of the past aims at reconstructing the past of this present, the present in which the act of imagination is going on, as here and now perceived. . . . every generation must rewrite history in its own way.
(Collingwood 1946, xii, 247–8)

Further, Collingwood's concept of empathetic re-enactment, to which Binford refers, is far more complex and sophisticated than the 'archaeology of mind' makes any claims to

be. Collingwood's doctrine 'can be seen as an attempt to describe certain transcendental pre-conditions that must be satisfied for historical knowledge to be possible' (Saari 1984, 36) – it is a philosophical argument, not an historical methodology. The historian seeks to understand what lies behind social acts, and for this Collingwood's empathy may be quite irrelevant (Carr 1961, 52; Runciman 1983, 16–21). While contextual archaeologists see themselves as part of the historical discipline, that does not mean that the approach is about rethinking past thoughts (see Miller and Tilley 1984b, 148).

The polis

For all the importance of epistemological self-awareness, it is by its substantive results that any piece of archaeological work must be judged. In this book I have sought to present a new view of the rise of the polis, arguing eight main points:

- 1 Burial was a powerful symbol in the creation of ideal social structures in ancient Greece.
- 2 From the Early Dark Age to the mid-eighth century, formal burial was in many places restricted to a group of *agathoi*.
- 3 During this time, the structure of Greek society was based around the serf-master relationship.
- 4 A major change occurred in the structure of funerary practices around 750 BC, which was related to other simultaneous changes in concepts of space, the gods and pollution.
- 5 This change corresponds to the invention of the idea of the polis and the appearance of citizenship and ultimately institutionalised chattel-slavery as the dominant social relationships.
- 6 The emergence of the polis probably represents an improvement in the way of life of the majority of its members, and probably came about through struggle from below.
- 7 The polis idea was overturned at Athens around 700 BC, and a structure similar to that of the Dark Age was reimposed, as is manifested in burial, sanctuary and literary evidence.
- 8 During the sixth century there was at Athens a gradual shift towards the polis ideal, which was finally recognised in the Cleisthenic reforms.

The rise of the polis is a process of great moment; although its institutional legacy to Rome and the modern world was small, it has had a profound and long-lasting effect on political theory. The truly remarkable aspect of the polis was the notion that the state should be autonomous from dominant-class interests. The ancient political thinkers recognised that the citizen body was composed of very different but functionally interdependent groups, some of whom would inevitably be stronger and wealthier than others (Plato, *Republic* 2.369B–371E; Aristotle, *Politics* 4.1289b27–1291b14), but the mechanisms of the state itself were intended to be free from the control of any single element within the whole community. The ideal of the polis was almost a classless society, where the state and the citizens were identical, protecting one another's positions. The

direct democracy as found in Classical Athens was possible only in a society where such a notion of the state was widely accepted.

The polis was a unique political achievement, which allowed an equally unparalleled cultural flowering to take place. However, we should not lose sight of those features which are less attractive to our sensibilities, above all the dark institution of chattel-slavery. The rise of the polis was the rise of slave society; the ideas of the autonomy of the state and the freedom of the citizen were bought only at the expense of the servitude of others. The polis was shot through with the fundamental contradiction created by the presence within it of large groups totally excluded from the political community.

Most of the conclusions reached in this book have been at the level of social structure, of ideals, rather than of social organisation. We may be sure that the elite struggled against the bonds of the polis throughout the Archaic and Classical periods, and where the structure of the citizen state was only weakly established (as at Athens in the late eighth century) they could succeed in breaking them. There was an essential tension within the polis, only finally resolved by the destruction of the ideal of the citizen estate in Roman times.

As Bradley notes (1984, 5), archaeologists are divided into optimists and pessimists. Much in this book will not have appealed to the latter, and I would be the first to agree that its conclusions are anything but final. New data may falsify the arguments or produce new theories supplanting the models employed. Uncertainty is inherent in any form of cognitive archaeology, even when textual evidence is deployed alongside the physical imprints of life and death in the ancient world. We simply learn to live with this. Borrowing yet another idea from Anthony Snodgrass, I will leave the last words to W.H. Auden:

A realist, he has always said
'It is Utopian to be dead,
For only on the Other Side
Are Absolutes all satisfied
Where, at the bottom of the graves
Low Probability behaves.'

W.H. Auden, *New Year Letter*

Classification of Attic cemeteries by age structure

Only cemeteries with at least four published graves are named; all cemeteries are included in the totals (T) for each period.

	Adult/youth	Child/infant	Unclear	n	Type
SUBMYCENAEAN					
Kerameikos, Pompeion	65%	9%	37%	111	A
Kriezi St	100%	—	—	12	A
Drakou St	78%	11%	11%	9	A
Erechtheiou St	100%	—	—	9	A
Olympieion	25%	75%	—	8	C
Acropolis	8%	92%	—	13	C
Kolonos Agoraios	33%	67%	—	6	C
Other Agora plots	43%	14%	43%	21	A & C
Total numbers	107	38	48	T=193	
Proportions	55%	20%	25%		
PROTOGEOMETRIC					
Kerameikos, Ag. Triada	89%	2%	9%	54	A
Kerameikos, N. Bank	83%	8%	8%	12	A
Erechtheiou St	67%	22%	11%	9	A
Kolonos Agoraios	13%	68%	19%	16	C
Other Agora plots	46%	46%	8%	13	A & C
Nymphaeum	22%	78%	—	9	C
Vas. Sophias Ave	100%(?)	—	—	62+	A
Nea Ionia	67%	33%	—	6	A/B
Total numbers	144	31	11	T=183	
Proportions	79%	17%	4%		
EARLY AND MIDDLE GEOMETRIC					
Kerameikos, Ag. Triada	88%	3%	9%	40	A
Kerameikos, N. Bank	80%	10%	10%	10	A
Kavalotti St	100%	—	—	18	A
Kriezi St	100%	—	—	10	A
Agora	57%	7%	36%	14	?A
Kynosarges	100%	—	—	5	A
Areopagus	72%	28%	—	14	A
Anavyssos	?100%	?—	—	?25	A
Eleusis South Cemetery	?100%	?—	—	6	A
Eleusis West Cemetery	50%	50%	—	6	B

Athens: total numbers	101	9	10	T=120
	84%	7%	9%	
Attica: total numbers	45	3	2	T=50
	90%	6%	4%	
Overall total	146	12	12	T=170
Overall proportions	86%	7%	7%	

LATE GEOMETRIC I

Kerameikos, Ag. Triada	76%	10%	14%	21	A
Kerameikos, N. Bank	100%	—	—	4	A
Agora, Tholos cemetery	100%	—	—	5	A
Other Agora plots	80%	20%	—	5	A
Peiraios St	100%	—	?	22	A
Kavalotti St	100%	—	—	6	A
Erechtheiou St	100%	—	—	5	A
Anavyssos	87%	9%	4%	23	A
Trachones	100%	—	—	6	A
Eleusis West Cemetery	40%	40%	20%	5	B
Athens: Total numbers	62	3	3	T=68	
	91%	4.5%	4.5%		
Attica: total numbers	31	4	5	T=40	
	78%	10%	12%		
Overall total	93	7	8	T=108	
	86%	6%	8%		

LATE GEOMETRIC II

Kerameikos, Ag. Triada	31%	45%	24%	29	B & C
Kerameikos, N. Bank	50%	31%	19%	16	A & B
Agora, Tholos cemetery	45%	45%	10%	9	B
Other Agora plots	40%	40%	20%	5	B
Nilios and Erysichthonos Sts	100%	—	—	9	A
Sapphous St	15%	77%	8%	13	C
Nymphaeum	27%	64%	9%	11	C
Kerameikos, Bau Z	40%	60%	—	5	B/C
Peiraios St	60%	40%	—	5	A/B
Academy	?	90%+	?	14 ¹	C
Anavyssos	44%	56%	—	18	B
Eleusis South Cemetery	27%	60%	13%	15	C
Eleusis West Cemetery	—	83%	17%	15	C
Trachones	27%	64%	9%	22	C
Thorikos	42%	28%	30%	36	B
Vari East Cemetery	57%	43%	—	7	B
Phaleron	~64%	~36%	?	25	A/B
Spata	43%	43%	14%	7	B
Athens: total numbers	45	50	17	T=112	
	40%	45%	15%		
Attica: total numbers	60	88	20	T=168	
	36%	53%	11%		
Total numbers	105	138	37	T=280	
	37%	49%	14%		

PROTOATTIC/TRANSITIONAL

Kerameikos, Ag. Triada	79%	21%	—	81	A
Kerameikos, N. Bank	96%	4%	—	25	A
Votanikos	100%	—	—	11 ²	A
Academy	?	90%+	?	4 ¹	C
Eleusis South Cemetery	A few	Many	?	?	C
Eleusis West Cemetery	—	100%	—	8	C
Phaleron	—	100%	—	20+	C
Vari East Cemetery	58%	42%	—	12	A
Vari North Cemetery	≥100%	?—	?	?	A
Thorikos	41%	59%	—	39	B & C
Athens: total numbers	93	22	—	T=115	
	81%	19%	—		
Attica: total numbers	47	60	2	T=109	
	43%	55%	2%		
Overall total	140	82	2	T=224	
	62%	37%	1%		

BLACK FIGURE

Kerameikos, Ag. Triada	75%	19%	6%	48	A
Kerameikos, S. Mound	50%	50%	—	4	B
Agora, Archaic Cemetery	83%	17%	—	12+ ³	A
Kynosarges	100%	—	—	4	A
Eleusis West Cemetery	—	100%	—	6	C
Liopesi	c.50%	c.50%	?	19	B
Sounion	50%	50%	—	4	B
Vari East Cemetery	63%	37%	—	8	A/B
Vari North Cemetery	≥100%	?—	?	≥30	A
Velanideza	100%	—	—	5	A
Vourva	100%	—	—	4	A
Athens: total numbers	59	14	3	T=76	
	78%	18%	4%		
Attica: total numbers	61	24	—	T=85	
	71%	29%	—		
Overall total	120	38	3	T=161	
	75%	23%	2%		

EARLY RED FIGURE

Kerameikos, Ag. Triada	58%	36%	6%	45	A/B
Kerameikos, S. Mound	29%	59%	12%	17	C/B
Agora Archaic Cemetery	89%	11%	—	9+ ³	A
Eleusis West Cemetery	12%	88%	—	8	C
Velanideza	100%	—	—	5	A
Vari East Cemetery	50%	50%	—	≥4	B
Athens: total numbers	46	28	6	T=80	
	58%	35%	7%		
Attica: total numbers	8	12	—	T=20	
	40%	60%	—		
Overall total	54	40	6	T=100	
	54%	40%	6%		

Notes

1. The published burials are all apparently child graves, but a small number of adult graves have also been excavated.
2. Some of these graves belong to the following period, but the chronological division is not clear.
3. Not counting undated graves with no pottery, the adult:child ratio was probably slightly higher in both BF and ERF.

List of sites analysed

All published sites in Attica from 1100–500 BC known to me at the time of writing are included here. The sites are listed in alphabetical order and numbered from west to east, so they can be found easily in figs. 61 and 62. Monographs are referred to in the system used in the rest of the book; for convenience periodicals are referred to only by title, date and pagination. The following abbreviations are employed:

- AA *Archäologischer Anzeiger*
 AAA *Athens Annals of Archaeology*
 ACE *Athens Center of Ekistics*
 AD *Arkhaiologikon Deltion*
 AE *Arkhaiologiki Ephemeris*
 AJA *American Journal of Archaeology*
 AM *Mitteilungen des deutschen archäologischen Instituts, Athenische Abteilung*
 BCH *Bulletin de correspondance hellénique*
 BSA *Annual of the British School at Athens*
 CVA *Corpus Vasorum Antiquorum*
 EA *Ephemeris Arkhaiologiki*
 JdI *Jahrbuch des deutschen archäologischen Instituts*
 JHS *Journal of Hellenic Studies*

A. Attica outside Athens

18. ACADEMY
Praktika 1956, 47–54; 1958, 5–13; 1959, 5–9; 1960, 318–23; 1962, 5–8; AD 17:2, 1961/2, 21–2; 19:2, 1964, 62–4. LG–RF graves and sanctuaries; LPG ritual deposit.
30. AG. IOANNIS RENDIS
 AD 23:2, 1968, 112; AAA 1, 1968, 34–5. Early 6th cent. kore.
38. AG. KOSMAS
 Jeffery 1962, 135; Richter 1970, no. 161. Late 6th cent. kouros.
54. AG. PARASKEVI
 Coldstream 1968, 399. LG vases.
63. AGRIELIKI
Praktika 1935, 154–5; Langdon 1976, 104–5. Dark Age and Archaic peak sanctuary.
17. AIGALEO
 AJA 64, 1960, 71; AD 19:2, 1964, 70. LG graves.
39. ALIKI GLYPHADA
Praktika 1955, 96. LG cult in Mycenaean tomb. Beazley 1956, 72. Early 6th cent. vase.
 Eliot 1962, 17. Geometric graves.
21. AMBELOKIPI
 AD 20:2, 1965, 103–7. 6th cent. remains.

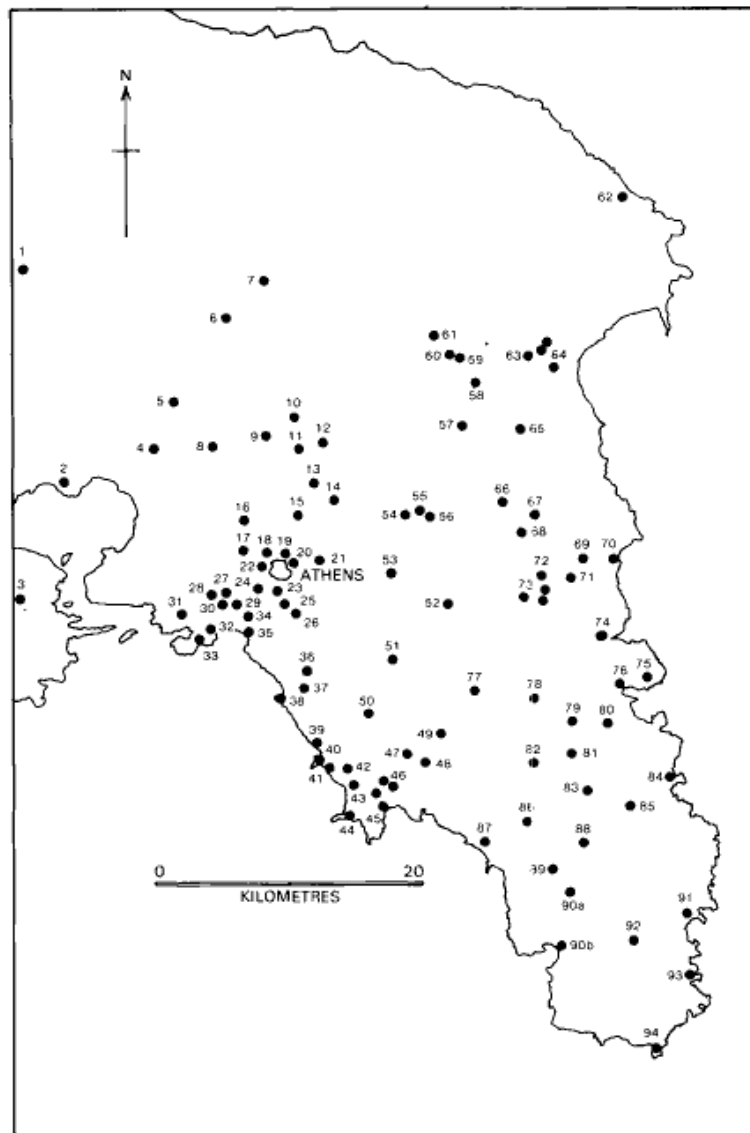


Fig.60. Published sites in Attica, 1100–500 BC

23. ANALATOS

JdI 14, 1899, 213. LG vase.

Cook 1934/5, pls. 38b, 39, PA vase.

90. ANAVYSSOS

(a) *AJA* 44, 1940, pls. 17.4; 21.4–6; 22.1–3. 8th cent. grave. *AD* 21:2, 1966, 97–8; 29:2, 1973/4, 108–10; Cavanagh 1977, Catalogue, 145–7; Borell 1978, 11, 96–7. MG and LG graves, some SM pottery (P.G. Themelis, pers. comm. 1983). From nearby: *AE* 1937, part 2, 668–72; *AAA* 7, 1974, 215–28. The 'Kroisos kouros', marking a 6th cent. grave. *AD* 25:2, 1970, 149. LPG grave.

(b) *Praktika* 1911, 110–31; Eliot 1962, 106. LG and Archaic graves. J.M. Cook 1934/5, 188–9. 7th cent. vases.

41. ANO VOULA

AD 29:2, 1973/4, 160. Late 6th cent. coin.

42. ANO VOULA
AD 29:2, 1973/4, 60. LG to 6th cent. settlement.
37. ARGYROUPOLI
AD 23:2, 1968, 112. MG graves.
26. DAPHNI
AD 25:2, 1970, 67. LPG to Archaic vases.
58. DIONYSO
Jeffery 1962, 134. Late 6th cent. grave marker.
31. DRAPETSONA
BCH 77, 1953, 202. 6th cent. grave.
66. DRAPHI
BCH 80, 1956, 246–7; 81, 1957, 516–19; 82, 1958, 681. LG–RF cemetery.
2. ELEUSIS
Mylonas 1961, with references; *Ergon* 1981, 45–6; BCH 105, 1981, 593–605. Geometric and Archaic sanctuaries. EA 1885, 169–84; 1898, 29–122; AE 1912, 1–39. South Cemetery, PG–6th cent. Travlos 1983. Sacred House and LG grave. Mylonas 1957; 1975. West Cemetery, MG–RF. AD 24:2, 1969, 76. Agathou St, 6th cent. grave stele. AD 22:2, 1967, 122–4; 25:2, 1970, 94; 30:2, 1975, 39. Thivon St, LG–6th cent. cemetery.
40. GLYPHADA
Richter 1961, no. 60A. 6th cent. grave stele. BCH 109, 1985, 767. Geometric graves.
60. IKARIA
Richter 1961, no. 46; Jeffery 1962, 135. 6th cent. kouros.
50. MT IMITTOS
Praktika 1949, 51–74; 1950, 144–65. LG–6th cent. sanctuary. Langdon 1976. PG–6th cent. sanctuary.
84. KAKI THALASSA
AA 1963, 455. LG vases. BCH 93, 1969, 823–9. 6th cent. vases.
34. KALLITHEA
BCH 87, 1963, 404–30; AD 19:2, 1964, 65–7. LG and 7th cent. graves. AD 23:2, 1968, 112. Late 6th cent. grave.
4. KALYVIA
AM 12, 1887, 325–7; Richter 1961, no. 35. 6th cent. grave markers.
82. KALYVIA KOUVARA
AE 1902, 43. LG–6th cent. cemetery. Cook 1934/5, 177; Beazley 1956, 42, 49. 7th and 6th cent. vases. AD 21:2, 1966, 106–7; 30:2, 1975, 48. 6th cent. kouros.
92. KAMARIZA
AD 24:2, 1969, 91. Late 6th cent. occupation.
1. KAVASILA
JHS 46, 1926, 6, n.2. 6th cent. walls.
85. KERATEA
AA 1963, 464. LG graves. Beazley 1956, 706. 6th cent. vases. Jeffery 1962, 142–3; Richter 1970, no. 89. 6th cent. stelai, kouros, kore.
88. KERATOVOUNI
Langdon 1976, 103. Geometric and 7th cent. peak sanctuary.
80. KHARVATI
ACE 21, 1973, 120. Geometric pottery. Jeffery 1962, 136. Archaic grave stone.
47. KIAPHA THITI
AA 1982, 305 and 313. LG settlement remains and temple.
48. KITSI PIGADI
ACE 21, 1973, 101. Geometric and other ancient graves.

77. KOROPI
BSA 46, 1951, 45–9. LG grave. Beazley 1956, 203, 247, 249. 6th cent. vases. Richter 1961, no. 20; Jeffery 1962, 138. 6th cent. stele.
12. KOUKOUVAONES
AD 10, 1926, Paratema 6, Geometric graves. *CVA Heidelberg* 3, G70, pl. 109.7. LG vase.
83. KOUVARA
Desborough 1952, 315–16. Geometric vase.
49. LAMBRIKA
AA 1982, 313. LG and Archaic settlement remains.
93. LAVRION
CVA Heidelberg 3, G64, pl. 111.5–7. LG vase. Beazley 1956, 10. Early 6th cent. vase. Jeffery 1962, 146. 6th cent. grave stones. Richter 1968, no. 104. Late 6th cent. kore.
19. LEVI
Richter 1961, no. 66; Jeffery 1962, 134. Late 6th cent. grave stone.
9. LIMNI ZOPHRA
AJA 64, 1960, 269. 6th cent. sanctuary.
52. LIOPEI
AD 25:2, 1970, 126–7. 6th cent. cemetery.
8. LIOSIA
CVA Copenhagen 2, 51–2, pl. 70.2–8, 10. LG grave group.
70. LOUTSA
Praktika 1957, 45–7. Late 6th cent. sanctuary.
64. MARATHON
(a) *Praktika* 1934, 29–38; 1939, 27–39; AA 1935, 181–2; 1940, 178–83. PG–6th cent. cemetery.
(b) AM 18, 1893, 53–62; Haspels 1936, 91–3. Early 6th cent. pottery.
(c) AAA 3, 1970, 14–16, 66, 153–4; AD 22:2, 1972, 151; Catling 1985a, 11. PG–Archaic settlement, PG grave.
(d) Jeffery 1962, 134. Late 6th cent. grave stone.
78. MARKOPOULO
AA 1962, 189; AD 26:2, 1971, 38–40; AAA 4, 1971, 143–6. Geometric graves. BCH 75, 1951, 111. 6th cent. graves. Jeffery 1962, 139; Richter 1970, no. 32. Early 6th cent. kouros.
65. MEGALO MAVROVOUNI
Langdon 1976, 102. 7th cent. peak sanctuary.
10. MENIDI
CVA Heidelberg 3, G52, pl. 103.7. MG grave group. LG cemetery excavated in this area in 1982, as yet unpublished. From nearby, Richter 1961, no. 63; Jeffery 1962, 135. Late 6th cent. grave stele.
11. MENIDI
Lolling *et al.* 1880; JdI 13, 1898, 13–28; 14, 1899, 103–35; Callipolitis-Feytmans 1965, 43–65; AA 1904, 40; Beazley 1956, 40, 42; Ohly 1953, 12, A 22. LG to 6th cent. hero cult at a Mycenaean tomb.
79. MERENDA
Athenaion 2, 1874, 484; *Ergon* 1960, 30–7; BCH 85, 1961, 626–30; AD 25:2, 1970, 127–9; AAA 5, 1972, 298–304; AE 1969, 217, n.9; Borell 1978, 13, 96–7; Coldstream 1977, 35. PG–6th cent. cemetery. Four PG vases are on display in Vravrona Museum. Jeffery 1962, 138–9. 6th cent. grave stelai. Beazley 1971, 61. Mid-6th cent. vase.
81. MT MERENDA
Langdon 1976, 103. Geometric and 7th cent. peak sanctuary.

5. METAMORPHOSIS
AD 27:2, 1972, 153. 6th cent. grave.
29. MOSCHATO
AM 63/4, 1938/9, 156, 160; Jeffery 1962, 134. Kouros and kore, early 6th cent.
33. MOUNYCHIA
Beazley 1956, 8. Early 6th cent. vase.
13. NEA IONIA
Hesperia 30, 1961, 147–78. LPG grave plot.
27. NEA KOKKINIA
AD 17:2, 1961/2, 43. LG grave.
25. NEOS KOSMOS
AD 29:2, 1973/4, 156. 6th cent. graves.
89. OLYMBOS
BSA 50, 1955, 58, no. 1; Richter 1968, no. 22. 7th cent. funerary plaque. *AM* 12, 1887, 304, no. 305; *BSA* 39, 1938/9, 90–3; Jeffery 1962, 143. 6th cent. inscriptions. Karusos 1961; Richter 1968, no. 103; 1970, no. 165; Jeffery 1962, 145. 6th cent. kouros and kore.
28. PALAIA KOKKINIA
Praktika 1951, 116–22. 9th–6th cent. graves. Beazley 1956, 2, 3. Late 7th-cent. vases.
43. PALAIOKHORI
Wrede 1934, 29; Eliot 1962, 33–4; *ACE* 21, 1973, 110. Archaic surface finds.
59. PALAIO STAMATA
ACE 21, 1973, plan 13. Archaic settlement. Richter 1961, no. 46. 6th cent. grave stone.
86. MT PANI
Langdon 1976, 102–3. LG and 7th cent. peak sanctuary.
6. MT PARNES
Hood 1960, 8; 1961, 5; Langdon 1976, 100–1. Geometric and 6th cent. sacrificial pyres.
7. PARNES CAVE
AM 5, 1880, 291–3; *Praktika* 1900, 38–41; *AE* 1905, 99–158; 1906, 89–116. Geometric–BF sherds.
15. PATISIA
AD 18:2, 1963, 42. MG grave.
32. PEIRAEUS
Richter 1961, no. 19. Late 6th cent. sculpture.
57. MT PENDELI
Jdl 55, 1940, 242–64; *BCH* 77, 1953, 110. 6th cent. vases.
75. PERATI
Iakovides 1970. LH IIIC/SM cemetery.
16. PERISTERI
Desborough 1952, 315–16. Geometric vase.
68. PETREZA
AM 15, 1890, 319; Beazley 1956, 347. 6th cent. grave.
35. PHALERON
BCH 17, 1893, 25–30; *CVA Copenhagen* 2, pl. 71.5; *AE* 1911, 246–51; *AD* 2, 1916, 13–64; *AJA* 46, 1942, 26–57; Beazley 1956, 7; 1971, 6. LG–early 6th cent. cemetery. Richter 1961, no. 17; Jeffery 1962, 134. 6th cent. grave stone. Richter 1970, no. 31. Early 6th cent. kouros.
87. PHOINIKIA
ACE 21, 1973, 87. Archaic walls and graves. Richter 1961, no. 26; Jeffery 1962, 145. 6th cent. stele.
67. PIKERMI
AAA 4, 1971, 75–6. Archaic sherds.

76. PORTO RAFTI
AD 30:2, 1975, 38. 6th cent. grave.
51. PROFITIS ELIAS
Archeologia 19, 1968, 89, no. 9; Langdon 1976, 104. Archaic peak cult.
53. PSYCHIKO
ACE 21, 1973, fig. 13. Dark Age remains.
62. RHAMNOUS
BCH 107, 1983, 752. Geometric layer and early 6th cent. temple. BCH 48, 1924, 305–20; BSA 45, 1950, 94–110. 6th cent. temple.
3. SALAMIS
AM 35, 1910, 17–36; Opuscula Atheniensa 4, 1965, 103–23. SM cemetery. AD 33:2, 1978, 51. Geometric deposit. AE 1948/9, 115–16; AD 20:2, 1965, 127. 6th cent. settlement.
20. SEPOLIA
Jeffery 1962, 133. 6th cent. grave stones.
94. SOUNION
AE 1917, 168–213; Snodgrass 1964, 96. 8th/7th cent. deposit. AE 1900, 133; 1913, 234; 1917, 168; AM 9, 1884, 324–37; BCH 47, 1923, 510; JHS 44, 1924, 274; AM 66, 1941, 87; AE 1953/4, 1–18. 6th cent. temple. AD 30:2, 1975, 38. Archaic graves. Richter 1970, no. 64. Early 6th cent. kouros. Richter 1961, no. 76. Late 6th cent. stele.
73. SPATA
AD 6, 1920/21, Paratema 131–8. LG–6th cent. graves. AD 19:2, 1964, 72. Late 6th cent. grave. J.M. Cook 1934/5, 203, pl. 46b–c; BSA 42, 1947, 147, fig. 6b; 47, 1952, 154, n. 1. 7th cent. grave group. Beazley 1956, 21, 223. 6th cent. vases.
55. STAVROS
AD 32:2, 1977, 43. Geometric cemetery.
24. TAVROS
AE 1975, 102–14. 8th to 6th cent. graves.
91. THORIKOS (see fig. 20b for site layout)
 1. Industrial quarter. Destroyed settlement remains. Thorikos II, 52; IV, 128–9; V, 103–4, 155; VII, 39–89, 111–71.
 2. D 52 area. Geometric settlement, 9th–6th cent. graves. Thorikos I, 20–3, 28–9; II, 25–36; III, 31–49; IV, 72–108; VIII, 74–150.
 3. Looted Geometric graves. AD 30:2, 1975, 52–3.
 4. Theatre, 6th cent. grave. Thorikos II, 78, 92; Miscellanea Graeca 5, 1982, 105–35.
 5. Geometric and Archaic South Cemetery. Thorikos I, 17; Antiquité Classique 34, 1965, 16–17.
 6. Velatouri peak, Archaic settlement. Thorikos III, 9–19.
 7. 8th–6th cent. hero cult in Mycenaean tomb III. Thorikos I, 12–13.
 8. MG I grave. Hesperia 30, 1961, 298–304.
Location unclear. Jeffery 1962, 146. 6th cent. grave stones.
14. TOURKOVOUNI
Wrede 1934, 13, 29; Classical World 35, 1941/2, 106; Yavis 1949, 101, no. 11; Langdon 1976, 101–2; Lauter 1985b. Geometric and Archaic peak sanctuary.
36. TRACHONES
AA 1940, 175. EG (?) graves. AM 88, 1973, 1–54. 8th/7th cent. graves.
46. VARI
 - (a) AA 1936, 123–5; 1937, 121–4; 1940, 175–8; BCH 61, 1937, 451; 82, 1958, 672–3; Papaspyridi-Karouzou 1963. North Cemeteries, LG–6th cent. graves.
 - (b) AD 7, 1891, 29–32; 17:2, 1961/2, 37–8; 18:1, 1963, 115–32; 20:2, 1965, 112–14; BCH 108, 1984, 27–36; 109, 1985, 31–48. East Cemetery, LG–6th cent. graves.
 - (c) AA 1940, 177–8; Lauter 1985a. Lathouresa settlement, 7th/6th centuries.

- AM 4, 1879, 302–6; Richter 1961, no. 4; *AJA* 7, 1903, 292, no. 7; Jeffery 1962, 135–6. Archaic sculptures and stelai.
72. VATHY PIGADI
ACE 21, 1973, 157. Early 6th cent. material. Richter 1961, no. 12; Jeffery 1962, 137. Early 6th cent. sculpture.
69. VELANIDEZA
AD 1890, 15–28. 6th cent. cemetery. *Ergon* 1957, 24–5; Jeffery 1962, 141; AD 21:1, 1966, 102–15. 6th cent. grave markers. Beazley 1956, 16. Early 6th cent. vases.
22. VOTANIKOS
AD 33:2, 1978, 21, 24–5. LG–6th cent. settlement deposits and cemetery.
44. VOULIAGMENI
CVA Heidelberg 3, G79, pl. 107.1,3; CVA Mainz 1, 16–17. LG vases. AD 11, 1927–8, 9–52. Late 6th cent. temple.
71. VOURVA
AM 15, 1890, 318–29; AD 1890, 105–12. 7th/6th cent. graves. *JdI* 18, 1903, 124–48. Early 6th cent. vases. Richter 1961, no. 91; 1968, no. 24; Jeffery 1962, 137. 6th cent. kore.
61. VOYIATI
BCH 71/2, 1947/8, 434. Geometric graves.
74. VRAVRONA
Ergon 1957, 20–5. Geometric graves. *Praktika* 1955, 118–20; *Ergon* 1959, 13–20; BCH 86, 1962, 664, 671; Beazley 1956, 475; 1971; Themelis 1971. Geometric and Archaic sanctuary.
56. YERAKAS
AM 52, 1927, 162–3, 6th cent. temple.

B. Athens

32. ACROPOLIS
Graef and Langlotz 1925; Kavvadias and Kawerau 1906; *AJA* 43, 1939, 289–98; *Hesperia* 10, 1941, 113–24; 15, 1946, 1–26, 73–106; AE 1960, 165–202; *AJA* 69, 1965, 176; Raubitschek 1949; Styrenius 1967; AD 21:2, 1966, 39–43. SM graves and traces of settlement and sanctuaries from the Dark Age to Archaic times. *AJA* 81, 1977, 78–9; *Hesperia* supp. vol. 20, 1982, 141–54. Klepsydra spring, LH IIIC–PG.
30. ACROPOLIS WEST SLOPE
Hesperia 43, 1974, 365–74. MG graves.
16. ADRIANOU ST
Hesperia 43, 1974, 374–85. MG I graves. AD 17:2, 1961/2, 27. Mid 6th cent. vases.
21. AG. DIMITRIOU ST
AD 19:2, 1964, 54–5. EG grave, late 7th cent. sherds.
26. AG. MARKOU ST
AD 19:2, 1964, 55–6. EG grave.
19. AG. THEKLAS/PITTAKI STS
AD 31:2, 1976, 25. SM graves.
27. AGORA
Excellent summaries are available in *The Athenian Agora* VIII (1962); XII (1970), 383–99; XIV; Styrenius 1967; Cavanagh 1977. The Dark Age material will be published in detail by Professor E.L. Smithson.
Submycenaean. Graves: *Hesperia* 7, 1938, 325; 14, 1945, 301; 22, 1953, 41–2; 44, 1975, 370–4; Styrenius 1967. Wells: *Hesperia* 30, 1961, 177; *Agora* VIII, pl. 45.
Protogeometric. Graves: *Hesperia* 2, 1933, 469; 5, 1936, 23–4; 6, 1937, 364–5, 368; 7, 1938, 325; 21, 1952, 108, 282; 23, 1954, 116; 24, 1955, 187; 30, 1961, 169, 171; 35, 1966, 82–3; 37, 1968, 31; 42, 1973, 398–400; Styrenius 1967. Wells: *Hesperia* 19, 1950, 37; 30, 1961, 177; *Agora* VIII, pl. 45.

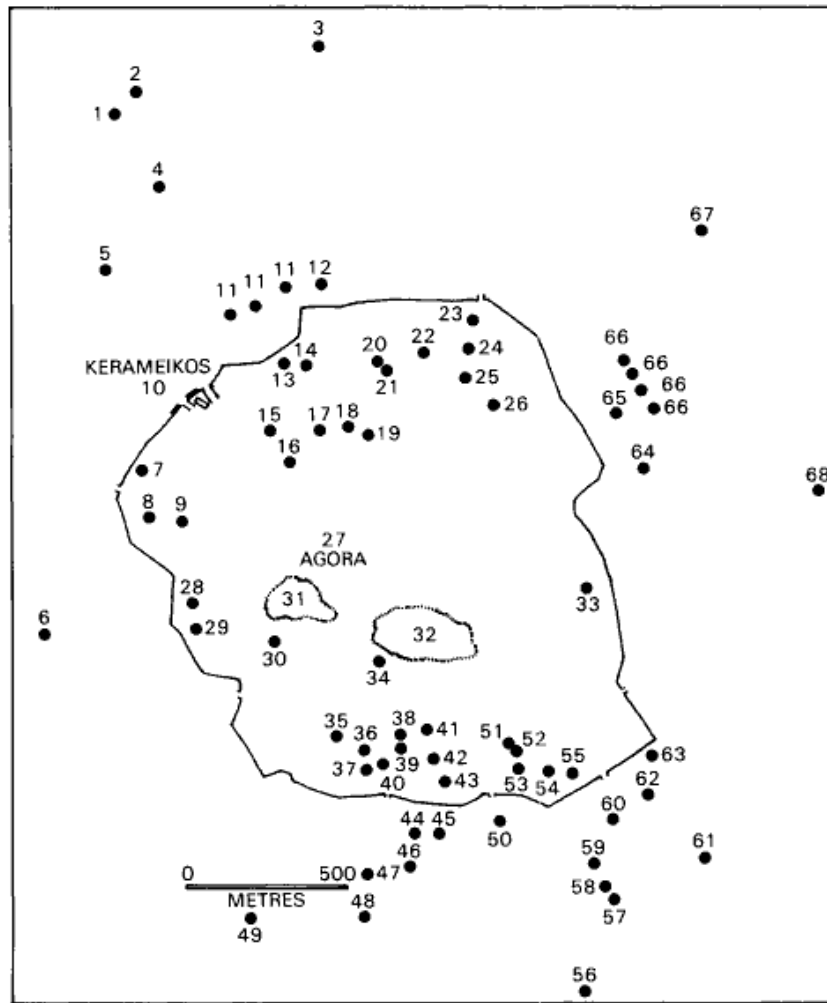


Fig.61. Published sites in Athens, 1100-500 BC

Early and Middle Geometric. Graves: *Hesperia* 2, 1933, 553; 16, 1947, 196-7; 18, 1948, 158-9; 21, 1952, 279-94; 25, 1956, 48-9; 37, 1968, 77-116; 43, 1974, 352-65. Wells: see *Agora* VIII, pl. 45.

Late Geometric. Graves: *Hesperia* 9, 1940, 271; 19, 1950, 330; 20, 1951, 187-252; 22, 1953, 39; 29, 1960, 402-16; *Hesperia* supp. vol. 2, 1939; *Agora* VIII, 125-31. Wells: *Hesperia* 20, 1951, 144-5, 218; 30, 1961, 93-146, 321-2. Roads: *Hesperia* 7, 1938, 4-5; *Hesperia* supp. vol. 2, 1939, 6-7; supp. vol. 4, 1941, 106-8. Oval building: *Hesperia* 2, 1933, 542-640.

Seventh century. Graves: *Hesperia* 20, 1951, 187-252; *Hesperia* supp. vol. 2. Wells: *Hesperia* 7, 1938, 412-28; 8, 1939, 212; 16, 1947, 210; 22, 1953, 39; 30, 1961, 305-79; *Hesperia* supp. vol. 2. Oval building: *Hesperia* 2, 1933, 542-640. Houses: *Hesperia* 25, 1956, 48; *Hesperia* supp. vol. 4, 6-7.

Sixth century. Graves: *Hesperia* 20, 1951, 187-252; *Hesperia* supp. vol. 2; *Agora* XII:2, 1970, 383. Wells: *Hesperia* 2, 1933, 472; 4, 1935, 365; 6, 1937, 559; 8, 1939, 235, 246-66; 9, 1940, 269; 15, 1946, 126-7; 20, 1951, 61-3, 174; 23, 1954, 51-4; 24, 1955, 62-6; 25, 1956, 57-64; 55, 1986, 1-74; *Hesperia* supp. vol. 4; *Agora* XII:2, 383-99. Drains: *Hesperia* 25, 1956, 49-52.

Roads: *Hesperia* 20, 1951, 145-9, 162; 28, 1959, 297; *Hesperia* supp. vol. 4, 106.

Pits: *Hesperia* 6, 1937, 131; 17, 1948, 159-60; *Hesperia* supp. vol. 4, 12-14. Rock-cut shaft: *Hesperia* 7, 1938, 363-411; 15, 1946, 265-336.

- Bronze casting: *Hesperia* 6, 1937, 82–3, 343–44.
 Houses: *Hesperia* 23, 1954, 36; 25, 1956, 48; *Hesperia* supp. vol. 4.
 Public buildings: *Hesperia* 6, 1937, 79–84; 29, 1960, 334–8; 40, 1971, 243–55; *Agora* XIV.
 Hero cults: *Hesperia* 27, 1958, 148–53; 37, 1968, 58–60. Altar of the 12 Gods: *Hesperia* 4, 1935, 355–8; 5, 1936, 358–9; 8, 1939, 155–64; 16, 1947, 198–9; 21, 1952, 47–82; 22, 1953, 46–7; *Hesperia* supp. vol. 8, 1949, 82–103.
23. AIOLOU ST
AD 31:2, 1976, 26. SM graves.
 24. AIOLOU/SOPHOKLEOUS STS
JHS 80, 1960, 52–8; *BCH* 86, 1962, 644–51; *AD* 18:2, 1963, 33–4. 8th–6th cent. graves, mostly destroyed.
 20. AISKHYLOU ST
AD 20:2, 1965, 56. EG grave.
 4. AKHILLEOS ST
AD 29:2, 1973/4, 123–4. 7th cent. grave. *AD* 19:2, 1964, 64. Late 6th cent. settlement evidence.
 9. AKTAIOU/NILIOS STS
AD 23:2, 1968, 36–8. Destroyed Geometric and Archaic graves.
 31. AREOPAGUS
Hesperia 43, 1974, 329–65. EG/MG graves. *AM* 17, 1892, 445; Judeich 1931, 400. Archaic graves.
 61. ARISTONIKOU ST
AD 29:2, 1973/4, 84. LG grave.
 3. ARISTOTELOUS ST
AD 18:2, 1963, 47. 6th cent. grave.
 67. ASKLEPIEION
AD 19:2, 1964, 24–7. 6th cent. graves.
 22. ATHINAS ST
AD 18:2, 1963, 32. 6th cent. graves.
 62. DIAKOU/ANAPAFSEOS STS
AD 18:2, 1963, 37–8. LG graves.
 51. DIAKOU/MARKRIYANNI STS
AD 25:2, 1970, 59. Geometric and Archaic sherds.
 45. DIMITRAKOPOULOU ST
AD 25:2, 1970, 55–8; *AAA* 3, 1970, 176–9. SM–LG graves. *AD* 27:2, 1972, 53. Geometric and Archaic sherds.
 6. DIMOPHONDOS ST
AD 24:2, 1969, 39. LG grave.
 46. DRAKOU ST
AD 32:2, 1977, 18–20. SM and MG graves.
 40. ERECHTHEIOU ST
AD 19:2, 1964, 87; 20:2, 1965, 84–7; 22:2, 1967, 55–7, 78; 23:2, 1968, 55–6; 29:2, 1973/4, 131–2; Brouskari 1979; *BSA* 75, 1980, 13–31. SM to late 6th cent. graves.
 15. ERMOU ST
AD 30:2, 1975, 21. LG–6th cent. settlement.
 8. ERYSICHTHONOS/NILIOS STS
AD 22:2, 1967, 79–83. LG graves.
 35. GARIBALDI ST
AD 18:2, 1963, 41. MG grave. *AD* 23:2, 1968, 48–9. LG grave.
 49. GENNAIOU KOLOKOTRONI ST
AD 23:2, 1968, 50–3. 6th cent. graves.

41. KALISPERI/KARYATIDON STS
AD 11, 1927/8, Paratema 2 no. 6. MG and LG graves.
18. KARAIKAKI/ARIONOS STS
AD 18:2, 1963, 32. PG and Geometric graves.
37. KAVALOTTI ST
AD 20:2, 1965, 75–80. EG–LG and late 6th cent. graves. AD 29:2, 1973/4, 90. Geometric and Archaic sherds. AE 1971, chronika, 11. 6th cent. vases.
10. KERAMEIKOS (see fig. 62)
G. Krause (1975) and Cavanagh (1977) provide excellent studies of the Kerameikos down to 700 BC, but no good general account of the Archaic cemetery is available.
Submycenaean. Kerameikos I, 1–177; *Hesperia* 30, 1961, 174–7; *AM* 78, 1963, 148–53.
Protogeometric. Kerameikos I, 100–8; IV; AD 19:2, 1964, 41–2; *AM* 81, 1966, 5–7.
Geometric. Kerameikos V.1; X, 197–9; AD 18:2, 1963, 29–30; *AA* 1964, 467; *AM* 81, 1966, 5–12, 113–16; 89, 1974, 1–25; 91, 1976, 15–22.
Archaic. Kerameikos VI.1; VI.2; VII.1; IX; X, 13; XII; *AM* 78, 1963, 104–48; 81, 1966, 12–21, 119; 90, 1975, 49–81; 91, 1976, 31–61; AD 19:2, 1964, 38–42; *AA* 1964, 420–62; 1983, 221; 1984, 27–35.
Early excavations. These are not very well published. Poulsen (1905, 16) gives a general account; the most useful reports are in *Praktika* 1873/4, 17–18, and *AM* 32, 1907, 157–8 and 559–62.
17. KHRISTOKOPIDOU ST
AD 19:2, 1964, 50–2. 6th cent. vases.
33. KODROU ST
AD 29:2, 1973/4, 41. LG/6th cent. settlement evidence.
60. KOKKINI ST
AD 28:2, 1973, 32. LG grave.
2. KONSTANDINOPOLEOS ST
AD 21:2, 1966, 74–7; *ACE* 17, 1972, 29–30. Late 6th cent. cemetery.
1. KONSTANDINOPOLEOS/ELEFSINION STS
AD 22:2, 1967, 97–8. Late 6th cent. grave.
14. KRANAOU/SARRI STS
AD 29:2, 1973/4, 32. PG vases.
11. KRIEZI ST.
AD 22:2, 1967, 92–6; 23:2, 1968, 67; *AAA* 1, 1968, 20–30. SM–RF graves.
57. KYNOSARGES
AD 27:2, 1972, 93–6; *AAA* 5, 1972, 165–76. MG, LG and late 6th cent. graves.
59. KYNOSARGES
BSA 2, 1895/6, 22–5; 12, 1905/6, 80–92. 8th/7th cent. graves.
- LARNAKA
Snodgrass 1964, 96, 128, from a Geometric grave. Location unclear, other than that Larnaka was on the banks of the river Ilissos.
55. LEMBESI/IOSIPH TON ROGON STS
AD 33:2, 1978, 17. LG and Archaic deposits.
53. LEMBESI/PORINOU STS
AD 25:2, 1970, 70–1. SM to Roman sherds.
54. LEMBESI ST/SYNGROU AVE
AD 33:2, 1978, 15–17. LG and later deposits.
52. MAKRIYANNI/PORINOU STS
AD 23:2, 1968, 73–4. LG graves.
48. MEIDANI ST
AD 19:2, 1964, 60. LG and EPA graves.

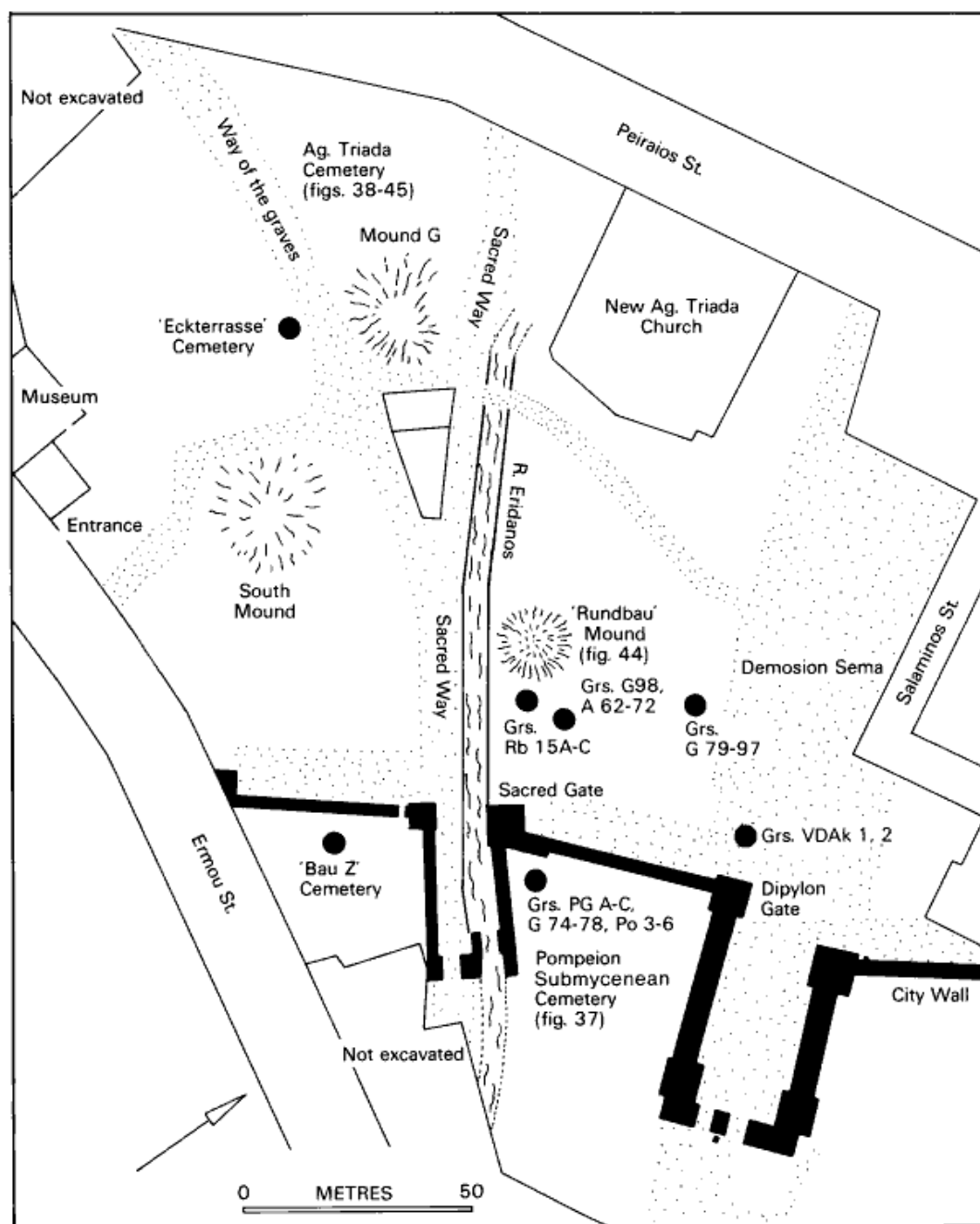


Fig.62. The Kerameikos cemeteries

43. MITSATION/ZITROU STS
AD 22:2, 1967, 102-3. MG grave.
28. NEA SPAGHEIA
AM 18, 1893, 414-15. LG grave.
34. NYMPHAEUM
AD 28:1, 1973, 1-64. PG-LG cemetery, late 6th cent. houses. *Ergon* 1957, 5-12. Archaic sanctuary. *Ergon* 1958, 157-61. 6th cent. water pipes and walls.

63. OLYMPIEION
Praktika 1886, 13–16; *Hesperia* 28, 1959, 250–1; *BCH* 84, 1960, 631–4. PG–6th cent. graves, mostly destroyed. *AD* 17:2, 1961/2, 9–14. Geometric and late 6th cent. walls.
66. PANEPISTIMIOU ST
AD 27:2, 1972, 71–5. Late 6th cent. graves.
5. PARAMYTHIAS/PLATAION STS
AD 27:2, 1972, 75–6. Archaic road.
38. PARTHENONOS ST
AD 17:1, 1961/2, 86, 90–1. MG graves. *AD* 22:2, 1967, 106–8. LG graves.
39. PARTHENONOS/ROVERTOU GALLI STS
AD 21:2, 1966, 71. 7th cent. building.
11. PEIRAIOS ST
 Early excavations: *Annali dell'istituto di corrispondenza archeologica* 44, 1872, 135–7; *Praktika* 1873/4, 17; *AM* 13, 1888, 294–303; 17, 1892, 205–28; 18, 1893, 73–191; Poulsen 1905, 10–12. PG–late 6th cent. graves. *AD* 17:2, 1961/2, 22–3; 21:2, 1966, 61–3; 23:2, 1968, 82. Geometric–late 6th cent. graves and wells.
29. PNYX
AA 1963, 431–9. 6th cent. grave stele.
7. POULOPOULOU ST
AD 22:2, 1967, 110–12. EG graves. *AD* 33:2, 1978, 10–12. Late 6th cent. temple.
25. PRAXITELOUS/EVRIPIDOU STS
AD 33:2, 1978, 13. SM grave.
36. PROMACHOU ST
AD 23:2, 1968, 89; *AA* 43, 1970, 112–17. LG graves.
56. PYTHEOU ST
AD 18:2, 1963, 43. Destroyed 6th cent. grave.
42. ROVERTOU GALLI ST
AD 22:2, 1967, 112. LG grave.
12. SAPPHOUS ST
AD 23:2, 1968, 89–92; 32:2, 1977, 27–8. LG/7th cent. graves. *AD* 24:2, 1969, 70. 6th cent. grave stele.
64. SYNDAGMA SQUARE
AE 1958, 1–152. PG settlement remains, late 6th cent. graves.
50. SYNGROU AVE
AD 20:2, 1965, 90. Geometric/Archaic settlement evidence.
58. THEOPHILOPOULOU ST
AD 27:2, 1972, 62. MG grave. *AD* 23:2, 1968, 61. Sub-Geometric grave. *AD* 29:2, 1973/4, 40. Late 6th cent. graves.
47. TSAMI KARATASOU ST
AE 1971, *chronika*, 10. 6th cent. graves.
68. VASILISSIS SOPHIAS AVE/IRODOU ATTIKOU ST
 H.W. Catling 1984, 7. SM–PG cemetery.
44. VEIKOU AVE
AD 24:2, 1969, 26–7; 25:2, 1970, 47. Geometric wall; Geometric and Archaic sherds.
65. VOULIS/PANEPISTIMIOU STS
AD 9, 1924/5, *Paratima* 68–72; *AA* 1927, 346–7. Geometric and Orientalising sherds, late 6th cent. graves.

BIBLIOGRAPHY

- Abercrombie, N., Hill, S., and Turner, B.S. (1980) *The dominant ideology thesis*. London, George Allen and Unwin.
- Acsádi, G., and Nemeskéri, K. (1970) *History of human lifespan and fertility*. Budapest, Akadémiai Kiadó.
- Adams, L. (1978) *Orientalizing sculpture in soft limestone from Crete and the mainland*. Oxford, British Archaeological Reports, International Series 42.
- Adams, R.McC. (1981) *Heartland of cities: surveys of ancient settlement and land use on the Central Euphrates floodplain*. Chicago, University Press.
- Ahlberg, G. (1971) *Fighting on land and sea in Greek Geometric art*. Stockholm, Skrifter utgivna i svenska institutet i Athen.
- Albore-Livadie, C. (1975) Remarques sur un group de tombes de Cumes, *Cahiers du centre Jean Bérard* 2, 53–8.
- Alden, M.J. (1981) *Population fluctuations in the Bronze Age of the Argolid from the evidence of Mycenaean tombs*. Göteborg, Studies in Mediterranean Archaeology 15.
- Alexandri, O. (1977) 3e ephoreia klasikon kai proistorikon arkhaiotiton, *Arkhaiologikon Deltion* 32:2, 16–35 (published 1984).
- Alexiou, M. (1974) *The ritual lament in Greek tradition*. Cambridge, University Press.
- Amyx, D., and Lawrence, P. (1975) *Corinth VII:2. Archaic Corinthian pottery and the Anaploga well*. Princeton, American School of Classical Studies.
- Andreev, J. (1979) Könige und Königsherrschaft in den Epen Homers, *Klio* 61, 361–84.
- Andreïmenou, A. (1973/4) Nekrotapheion para tin arkhaian Akraiphian, *Arkhaiologikon Deltion* 29:3, 425–27 (published 1979).
- (1974) Nekrotapheia para to arkhaion Akraiphnion, *Athens Annals of Archaeology* 7, 325–38.
- (1975) Akraiphia, *Arkhaiologikon Deltion* 30:2, 128 (published 1983).
- (1976a) Arkhaiotites kai mnimeia Evvias, *Arkhaiologikon Deltion* 31:2, 131–6 (published 1984).
- (1976b) Arkhaiotites kai mnimeia Viotias, *Arkhaiologikon Deltion* 31:2, 119–21 (published 1984).
- (1977a) Geometriki kai ypogeometriki kerameiki ex Eretrias, *Arkhaiologiki Ephemeris*, 128–37.
- (1977b) Anaskaphikes erevnes, *Arkhaiologikon Deltion* 32:2, 95–7 (published 1984).
- (1977c) To nekrotapheion tis arkhaias Akraiphias, *Athens Annals of Archaeology* 10, 273–86.
- (1980) To kerameikon ergasterion tis Akraiphias. Ph.D. dissertation, Athens University.
- (1981) Apsidota oikodomimata kai kerameiki tou 8ou kai 7ou aiona en Eretria, *Annuario della scuola archeologica di Atene* 59, 187–236.
- (1985) La nécropole classique de Tanagra, in *La Béotie antique*, 109–30. Paris, Editions CNRS.
- Angel, J.L. (1939) Geometric Athenians, in R.S. Young, *Late Geometric graves and a seventh-century well*, 236–46. Princeton, *Hesperia* supp. vol. 2.
- (1945) Skeletal material from Attica, *Hesperia* 14, 279–363.
- (1971) *The people of Lerna: analysis of a prehistoric Aegean population*. Princeton, American School of Classical Studies.

- (1972) Ecology and population in the East Mediterranean, *World Archaeology* 4, 88–105.
- Appadurai, A. (ed.) (1986) *The social life of things*. Cambridge, University Press.
- Archontidou-Argyri, A. (1983) Mimiseis protokorinthiakon angeion apo tin Rodo, *Annuario della scuola archeologica di Atene* 61, 19–29.
- Ariès, P. (1974) *Western attitudes toward death*. Baltimore, Johns Hopkins University Press.
- (1981) *The hour of our death*. Harmondsworth, Peregrine books. First published in French, 1977.
- Arvanitopoulos, A.S. (1911) Anaskaphai kai erevnai en Thessaliai kata to etos 1911, *Praktika*, 280–356.
- (1914) Thessalias, *Arkhaiologiki Ephemeris*, 141.
- Asad, T. (1979) Anthropology and the analysis of ideology, *Man* n.s. 14, 607–27.
- Austin, M., and Vidal-Naquet, P. (1977) *Economic and social history of ancient Greece. An introduction*. London, Batsford. First published in French, 1972.
- Baba, K. (1984) On Ker. Inv. I 388 (*SEG XXII*, 79). A note on the formation of the Athenian metic-status, *Annual of the British School at Athens* 79, 1–5.
- Barlau, S. (1976) An outline of Germanic kinship, *Journal of Indo-European Studies* 4, 97–130.
- Beazley, J.D. (1956) *Attic black-figure vase painters*. Oxford, Clarendon Press.
- (1971) *Paralipomena*. Oxford, Clarendon Press.
- Beloch, J. (1886) *Die Bevölkerung der griechischen-romischen Welt*. Leipzig, reprinted Rome, 1968.
- (1905) Griechische Aufgebote I, *Klio* 5, 341–74.
- Benson, J.L. (1953) *Die Geschichte der korinthischen Vasen*. Basle, Benno Schwabe Verlag.
- (1970) *Horse, bird and man. The origins of Greek painting*. Amherst, University of Massachusetts Press.
- Bérard, C. (1970) *L'héroon à la porte de l'ouest. Eretria III*. Berne, Editions Francke.
- (1982) Récuperer la mort du prince: héroisation et formation de la cité, in G. Gnoli and J.-P. Vernant (eds.), *La mort, les morts, dans les sociétés anciennes*, 89–105. Cambridge, University Press.
- Beringer, W. (1982) 'Servile status' in the sources for early Greek history, *Historia* 31, 13–32.
- Binford, L.R. (1971) Mortuary practices: their study and their potential, in J.A. Brown (ed.), *Approaches to the social dimensions of mortuary practices*, 6–29. New York, Memoirs of the Society for American Archaeology 25. Reprinted in Binford 1972, 208–43.
- (1972) *An archaeological perspective*. New York and London, Seminar Press.
- (1982) Meaning, inference and the material record, in A.C. Renfrew and S. Shennan (eds.), *Ranking, resource and exchange*, 160–3. Cambridge, University Press.
- (1983) *In pursuit of the past*. London, Thames and Hudson. Edited by J.F. Cherry and R. Torrence.
- Bingen, J. (1984) La nécropole géométrique ouest 4 (1971 et 1975), *Thorikos VIII*, 1972–1976, 72–150. Brussels, Comité des fouilles belges en Grèce.
- Bintliff, J. (1982) Settlement patterns, land tenure and social structure: a diachronic model, in A.C. Renfrew and S. Shennan (eds.), *Ranking, resource and exchange*, 106–11. Cambridge, University Press.
- (1985) The Boeotia survey, in S. Macready and F.H. Thompson (eds.), *Archaeological field survey in Britain and abroad*, 196–216. London, Society of Antiquaries Occasional Paper (n.s.) no. 6.
- Bintliff, J., and Snodgrass, A.M. (1985) The Cambridge/Bradford Boeotia expedition: the first four years, *Journal of Field Archaeology* 12, 123–61.
- Bisel, S. (1980) A pilot study in aspects of human nutrition in the ancient Eastern Mediterranean. Ph.D. thesis, University of Minnesota.
- Blauner, R. (1966) Death and social structure. *Psychiatry* 29, 378–94.

- Bloch, Marc (1962) *Feudal society I: the growth of ties of dependence*. London, Routledge and Kegan Paul. First published in French, 1940.
- Bloch, Maurice (1977) The past and the present in the present, *Man* n.s. 12, 278–92.
- (1982) Death, women and power, in M. Bloch and J. Parry (eds.), *Death and the regeneration of life*, 211–30. Cambridge, University Press.
- Bloch, M., and Parry, J. (1982) Introduction: death and the regeneration of life, in M. Bloch and J. Parry (eds.), *Death and the regeneration of life*, 1–44. Cambridge, University Press.
- Boardman, J. (1952) Pottery from Eretria, *Annual of the British School at Athens* 47, 1–48.
- (1955) Painted funerary plaques and some remarks on prothesis, *Annual of the British School at Athens* 50, 51–66.
- (1957) Early Euboean pottery and history, *Annual of the British School at Athens* 52, 1–29.
- (1960) Protogeometric graves at Ag. Ioannis, near Knossos, *Annual of the British School at Athens* 55, 128–48.
- (1965) Tarsus and early Greek chronology, *Journal of Hellenic Studies* 85, 5–15.
- (1967) *Greek Emporio*. London, Thames and Hudson. *Annual of the British School at Athens* Supplementary Volume 6.
- (1984) *Signa tabulae priscae artis*, *Journal of Hellenic Studies* 104, 161–63.
- Boardman, J., and Hayes, J. (1966) *Excavations at Tocra 1963–1965. The Archaic deposits I*. London, Thames and Hudson. *Annual of the British School at Athens* Supplementary Volume 4.
- Bocquet-Appel, J.-P., and Masset, C. (1982) Farewell to paleodemography, *Journal of Human Evolution* 11, 321–33.
- Boehlau, J. (1898) *Aus ionischen und italischen Nekropolen*. Leipzig, Teubner.
- Bordes, F. (1982) *Politeia dans la pensée grecque jusqu'à Aristote*. Paris, Société d'édition des belles lettres.
- Borell, B. (1978) *Attische geometrische Schalen*. Mainz, Verlag Philipp von Zabern.
- Bottomore, T. (1964) *Elites and society*. Harmondsworth, Penguin.
- Bourdillon, M. (1978) Knowing the world or hiding it: a response to Maurice Bloch, *Man* n.s. 13, 591–600.
- Bourriot, F. (1976) *Recherches sur la nature du génois. Etude d'histoire sociale athénienne, périodes archaïque et classique*. Paris, Champion.
- Boyd, H.A. (1901) Excavations at Kavousi, Crete, *American Journal of Archaeology* (2nd series) 5, 125–57.
- Bradley, R. (1984) *The social foundations of prehistoric Britain. Themes and variations in the archaeology of power*. London, Longmans.
- Brann, E. (1960) Late Geometric graves from the Athenian Agora, *Hesperia* 29, 402–16.
- (1962) *The Athenian Agora VIII. Late Geometric and Protoattic pottery*. Princeton, American School of Classical Studies.
- Braudel, F. (1958) Histoire et sciences sociales. La longue durée, *Annales, économies, sociétés, civilisations* 13, 725–53.
- (1972) *The Mediterranean and the Mediterranean world at the time of Philip II*. London, Fontana. First published in French, 1949.
- Braun, D.P. (1981) A critique of some recent North American mortuary studies, *American Antiquity* 46, 398–416.
- Breiting, E. (1939a) Die Brandreste aus den protogeometrischen Amphoren, in W. Kraiker and K. Kübler, *Kerameikos I*, 257–61. Berlin, de Gruyter.
- (1939b) Die Skelette aus den submykenischen Gräbern, in W. Kraiker and K. Kübler, *Kerameikos I*, 233–55. Berlin, de Gruyter.
- Bremmer, J. (1983) *The early Greek concept of the soul*. Princeton, University Press.
- Brock, J.K. (1957) *Fortetsa: early Greek tombs near Knossos*. Cambridge, University Press. *Annual of the British School at Athens* Supplementary Volume 2.

- Brookes, A.C. (1981) Stoneworking in the Geometric period at Corinth, *Hesperia* 50, 285–90.
- Brouskari, M. (1979) *Apo ton athinaiko kerameiko tou 8ou. ai. p. Chr.* Athens, Dimosievmeta tou Arkhaiologikou Deltiou no.27.
- Brown, J.A. (1971) The dimensions of status in the burials at Spiro, in J.A. Brown (ed.), *Approaches to the social dimensions of mortuary practices*, 92–112. New York, Memoirs of the Society for American Archaeology no. 25.
- (1981) The search for rank in prehistoric burials, in R. Chapman, I. Kinnes and K. Randsborg (eds.), *The archaeology of death*, 25–38. Cambridge, University Press.
- Brückner, A. and Pernice, E. (1893) Ein attischer Friedhof, *Athenische Mitteilungen* 18, 73–191.
- Brug, J.F. (1985) *A literary and archaeological study of the Philistines*. Oxford, British Archaeological Reports, International Series 265.
- Buck, R.J. (1979) *A history of Boeotia*. Edmonton, University of Alberta Press.
- Buikstra, J.E., and Konigsberg, L.W. (1985) Paleodemography: critiques and controversies, *American Anthropologist* 87, 316–33.
- Burrows, R.M. and Ure, P.N. (1907/8) Excavations at Rhitsóna in Boeotia, *Annual of the British School at Athens* 14, 226–318.
- (1909) Excavations at Rhitsóna in Boeotia, *Journal of Hellenic Studies* 29, 308–53.
- Callipolitis-Feytmans, D. (1965) *Les loutérias attiques*. Athens, Publications de l'Archeologicon Deltion no.6.
- Cambitoglou, A. (1981) *Archaeological museum of Andros*. Athens.
- Camp, J.McK. (1979) A drought in the late eighth century BC, *Hesperia* 48, 397–411.
- Carneiro, R.L. (1967) On the relationship between size of population and complexity of social organization, *Southwestern Journal of Anthropology* 23, 234–41.
- (1970) A theory of the origin of the state, *Science* 169, 733–8.
- (1981) The chiefdom: precursor of the state, in G.D. Jones and R.R. Kautz (eds.), *The transition to statehood in the New World*, 37–79. Cambridge, University Press.
- Carr, E.H. (1961) *What is history?* London, Macmillan.
- Cartledge, P.A. (1977) Hoplites and heroes: Sparta's contribution to the technique of ancient warfare, *Journal of Hellenic Studies* 97, 11–28.
- (1980) Euphron and the *douloi* again, *Liverpool Classical Monthly* 5, 209–11.
- (1985) Rebels and sambos in Classical Greece: a comparative view, in P.A. Cartledge and F.D. Harvey (eds.), *Crux: essays presented to G.E.M. de Ste Croix on his 75th birthday*, 16–46. Exeter, Academic Imprint (History of Political Thought VI.1/2).
- Cassola, F. (1964) Solone, la terra e gli ectemoroí, *Parola del Passato* 19, 26–68.
- Catling, H.W. (1979) Knossos, 1978, *Archaeological Reports for 1978–79*, 43–8.
- (1984) Archaeology in Greece, 1983–1984, *Archaeological Reports for 1983/4*, 3–70.
- (1985a) Archaeology in Greece, 1984–1985, *Archaeological Reports for 1984/5*, 3–69.
- (1985b) The arrangement of some grave goods in the Dark Age cemeteries of Lefkandi, *Annual of the British School at Athens* 80, 19–23.
- Catling, R. (1984) New archaeology, *Classical Review* n.s. 34, 98–103.
- Cavanagh, W.G. (1977) Attic burial customs, c.2000–700 BC. Ph.D. thesis, Bedford College, London.
- Chagnon, N. (1982) Fissioning in an Amazonian tribe, in D. Hunter and P. Whitton (eds.), *Anthropology: contemporary perspectives*, 161–4. 3rd edition, Boston, Little, Brown and Co.
- Champion, T., Gamble, C., Shennan, S., and Whittle, A. (1984) *Prehistoric Europe*. London and New York, Academic Press.
- Chapman, R., and Randsborg, K. (1981) Perspectives on the archaeology of death, in R. Chapman, I. Kinnes and K. Randsborg (eds.), *The archaeology of death*, 1–24. Cambridge, University Press.
- Charitonides, S. (1953) Anaskaphai en Nafplia, *Praktika*, 191–204.
- (1954) Anaskaphai Nafplias, *Praktika*, 232–41.

- (1966) Arkhaiotites kai mnimeia Argolido-korinthias, *Arkhaiologikon Deltion* 21:2, 121–32 (published 1968).
- (1973) Evrimata protogeometrikis kai geometrikis epokhis tis anaskaphis notion tis Akropoleos, *Arkhaiologikon Deltion* 28:1, 1–63 (published 1975).
- Charles, R.-P. (1958) Etude anthropologique des nécropoles d'Argos, *Bulletin de correspondance hellénique* 82, 268–313.
- (1963) *Etude anthropologique des nécropoles d'Argos: contribution à l'étude des populations de la Grèce antique*. Paris, Etudes peloponnésiennes III.
- (1965) *Anthropologie archéologique de la Crète*. Paris, Etudes crétoises XIV.
- Chaunu, P. (1976) Mourir à Paris (XVIe–XVIIe–XVIIIe siècles), *Annales, économies, sociétés, civilisations* 31, 29–50.
- Cherry, J.F. (1982) Appendix A: register of archaeological sites on Melos, in A.C. Renfrew and M. Wagstaff (eds.), *An island polity*, 291–309. Cambridge, University Press.
- (1984) The emergence of the state in the prehistoric Aegean, *Proceedings of the Cambridge Philological Society* 210, 18–48.
- Childe, V.G. (1945) Directional changes in funerary practices during 50,000 years, *Man* 45, 13–19.
- Cipolla, C.M. (1978) *The economic history of world population*. 7th edition, Harmondsworth, Penguin.
- Clairmont, C. (1983) *Patrios Nomos: public burial in Athens during the fifth and fourth centuries BC*. Oxford, British Archaeological Reports, International Series 161.
- Clarke, D.L. (1973) Archaeology: the loss of innocence, *Antiquity* 47, 6–18.
- (1976) The Beaker Network – social and economic models, in J.N. Lanting and J.D. van der Waals (eds.), *Glockenbechersymposium 1974*, 459–76. Bussum and Haarlem, Fibula-van Dishoeck.
- (1978) *Analytical archaeology*. 2nd edition, ed. R. Chapman, London, Methuen.
- Colb, C.C. (1985) Demographic estimates in archaeology: contributions from ethnoarchaeology on Mesoamerican peasants, *Current Anthropology* 26, 581–99.
- Coldstream, J.N. (1963) Five tombs at Knossos, *Annual of the British School at Athens* 58, 30–43.
- (1968) *Greek Geometric pottery: a survey of ten local styles and their chronology*. London, Methuen.
- (1976) Hero cults in the Age of Homer, *Journal of Hellenic Studies* 96, 8–17.
- (1977) *Geometric Greece*. London, Methuen.
- (1983) The meaning of the regional styles in the eighth century BC, in R. Hägg (ed.), *The Greek renaissance of the eighth century BC*, 17–25. Stockholm, Skrifter utgivna i svenska institutet i Athen.
- (1984) Dorian Knossos and Aristotle's villages, in *Aux origines de l'hellénisme, la Crète et la Grèce. Hommages à Henri van Effenterre*, 311–22. Paris, Publications de la Sorbonne, histoire ancienne et médiévale no. 15.
- Coldstream, J.N., Callaghan, P., and Musgrave, J. (1981) Knossos: an early Greek tomb on lower Gypsadhes hill, *Annual of the British School at Athens* 76, 141–65.
- Collingwood, R.G. (1946) *The idea of history*. Oxford, University Press.
- Compernelle, R. van (1960) *Etude de chronologie et d'historiographie sicilote*. Brussels, Palais des académies.
- Conrad, G.W., and Demarest, A.A. (1984) *Religion and empire: the dynamics of Aztec and Inca expansionism*. Cambridge, University Press.
- Cook, J.M. (1934/5) Protoattic pottery, *Annual of the British School at Athens* 35, 165–219.
- Cook, R.M. (1969) A note on the absolute chronologies of the eighth and seventh centuries BC, *Annual of the British School at Athens* 64, 13–15.
- (1972) *Greek painted pottery*. 2nd edition, London, Methuen.

- Courbin, P. (1954) Nécropole et céramique, *Bulletin de correspondance hellénique* 78, 175–83.
 (1955) Argos, quartier sud, *Bulletin de correspondance hellénique* 79, 312–14.
 (1956) Quartier sud, *Bulletin de correspondance hellénique* 80, 366–76.
 (1974) *Tombes géométriques d'Argos I*. Paris, Etudes peloponnesiens.
 (1977) Review of Hägg 1974 in *Revue archéologique*, 326–30.
- Daux, G. (1958) Chronique des fouilles en 1957, *Bulletin de correspondance hellénique* 82, 644–830.
 (1967) Chronique des fouilles en 1966, *Bulletin de correspondance hellénique* 91, 623–890.
- Davies, J.K. (1977/8) Athenian citizenship: the descent group and the alternatives, *Classical Journal* 73, 105–21.
 (1984) The reliability of the oral tradition, in L. Foxhall and J.K. Davies (eds.), *The Trojan War. Its historicity and context*, 87–110. Bristol, Classical Press.
- Debord, P. (1973) Esclavage mycénien, esclavage homérique, *Revue des études anciennes* 75, 225–40.
- Deilaki, E. (1964) Anaskaphi eis Nosokomeion Argous, *Arkhaiologikon Deltion* 19:2, 122–7 (published 1966).
 (1973/4) Ephoreia klasikon arkhaiotiton Nafpliou 1973–1974, *Arkhaiologikon Deltion* 29:3, 199–210 (published 1980).
 (1980) I tymvi tou Argous. Ph.D. thesis, University of Athens.
 (1982) Apo to Argos tou 8ou. kai 7ou. aiona p. Chr., *Annuario della scuola archeologica di Atene* 60, 33–48.
- Desborough, V.R. (1952) *Protogeometric pottery*. Oxford, Clarendon Press.
 (1972) *The Greek Dark Ages*. London, Dent.
- Descœudres J.-P. (1976) Die vorklassische Keramik aus dem Gebiet des Westtors, *Eretria V*, 13–58. Berne, Editions Francke.
 (1978) Euboeans in Australia, *Eretria VI*, 7–19. Berne, Editions Francke.
- Detienne, M. (1963) *Crise agraire et attitude religieuse chez Hésiode*. Brussels, Latomus.
 (1968) La phalange: problèmes et controverses, in J.-P. Vernant (ed.), *Problèmes de la guerre en Grèce ancienne*, 119–42. Paris, Mouton.
- Diamant, S. (1982) Theseus and the unification of Attica, in *Studies presented to Eugene Vanderpool*, 38–47. Princeton, *Hesperia* supplement 19.
- Donlan, W. (1985) The social groups of Dark Age Greece, *Classical Philology* 80, 293–308.
- Dontas, G. (1961/2) Anaskaphi oikopedou Angelopoulou, *Arkhaiologikon Deltion* 17:1, 83–95 (published 1963).
 (1983) The true Aglaureion, *Hesperia* 52, 48–63.
- Dörpfeld, W. (1892) Die Ausgrabungen an der Enneakrunos, *Athenische Mitteilungen* 17, 439–45.
- Dothan, T. (1982) *The Philistines and their material culture*. New Haven, Yale University Press.
- Douglas, M. (1966) *Purity and danger: an analysis of the concepts of pollution and taboo*. London, Routledge and Kegan Paul.
- Drews, R.L. (1983) *Basileus: the evidence for kingship in Geometric Greece*. New Haven, Yale University Press.
- Dunbabin, T.J. (1948) *The western Greeks*. Oxford, Clarendon Press.
 (1953/4) The chronology of Protocorinthian vases, *Arkhaiologiki Ephemeris* part 2, 247–62.
- Effenterre, H. van (1985) *La cité grecque*. Paris, Hachette.
- Ehrenberg, V. (1969) *The Greek state*. London, Methuen.
- Eliot, C.W.J. (1962) *The coastal demes of Attika*. Toronto, *Phoenix* supplementary volume 21.

- Ellison, A., and Drewett, P. (1971) Pits and post-holes in the British Early Iron Age: some alternative explanations, *Proceedings of the Prehistoric Society* 37, 183–94.
- Evans-Pritchard, E.E. (1956) *Nuer religion*. Oxford, University Press.
- Felsch, R.C.S., Kienast, H.J., and Schuler, H. (1980) Apollon und Artemis oder Artemis und Apollon?, *Archäologischer Anzeiger*, 38–123.
- Fenik, B. (1968) *Typical battle scenes in the Iliad. Studies in the narrative techniques of Homeric battle description*, Wiesbaden, Franz Steiner Verlag (*Hermes Einzelschrift* 21).
- Finley, M.I. (1968a) Slavery, *International encyclopedia of the social sciences* vol. 14, 307–13. New York, Macmillan and the Free Press.
- (1968b) The alienability of land in ancient Greece: a point of view, *Eirene* 7, 25–32.
- (1978) *The world of Odysseus*. Revised edition, London, Chatto and Windus. Reprinted Harmondsworth, Penguin (1979).
- (1980) *Ancient slavery and modern ideology*. London, Chatto and Windus. Reprinted Harmondsworth, Penguin (1983).
- (1981a) Politics, in M.I. Finley (ed.), *The legacy of Greece*, 22–36. Oxford, University Press.
- (1981b) *Economy and society in ancient Greece*. London, Chatto and Windus. Reprinted Harmondsworth, Penguin, ed. B.D. Shaw and R.P. Saller (1983).
- (1982) Problems of slave society: some reflections on the debate, *Opus* 1, 201–11.
- (1983) *Politics in the ancient world*. Cambridge, University Press.
- (1985a) *The ancient economy*. 2nd edition, London, Hogarth Press.
- (1985b) *Ancient history: evidence and models*. London, Chatto and Windus.
- Finnegan, R. (1977) *Oral poetry*. Cambridge, University Press.
- Firth, R. (1957) A note on descent groups in Polynesia, *Man* 57, 4–7.
- Flannery, K.V. (1972) The cultural evolution of civilizations, *Annual Review of Ecology and Systematics* 3, 399–426.
- Flannery, K.V., and Marcus, J. (eds.) (1983) *The Cloud People. Divergent evolution of the Zapotec and Mixtec civilizations*. New York and London, Academic Press.
- Fletcher, R. (1981) People and space: a case study in material behaviour, in I. Hodder, G. Isaac and N. Hammond (eds.), *Pattern of the past: studies in honour of David Clarke*, 97–128. Cambridge, University Press.
- Forge, A. (1972) Normative factors in the settlement size of Neolithic cultivators (New Guinea), in P.J. Ucko, G.W. Dimbleby and R. Tringham (eds.), *Man, settlement and urbanism*, 363–76. London, Duckworth.
- Forrest, W.G. (1966) *The emergence of Greek democracy*. London, Weidenfeld and Nicholson.
- Fossey, J.M. (1986) *The ancient topography of Eastern Phokis*. Amsterdam, J.C. Gieben.
- Foster, G. (1960) Interpersonal relations in peasant society, *Human Organization* 19, 174–8.
- Fox, R. (1967) *Kinship and marriage: an anthropological perspective*. Harmondsworth, Penguin.
- Francis, E.D., and Vickers, M.J. (1981) Leagros kalos, *Proceedings of the Cambridge Philological Society* 207, 97–136.
- (1983) Signa priscae artis: Eretria and Siphnos, *Journal of Hellenic Studies* 103, 49–67.
- Francotte, H. (1907) *La polis grecque*. Paderborn, Verlag von Ferdinand Schöningh.
- Frankenstein, S., and Rowlands, M.J. (1978) The internal structure and regional context of Early Iron Age society in south-western Germany, *Bulletin of the Institute of Archaeology* 15, 73–112.
- Fraser, P.M. (1977) *Rhodian funerary monuments*. Oxford, University Press.
- Fredrickson, G.M. (1980) Comparative history, in M. Kammen (ed.), *The past before us. Contemporary historical writing in the United States*, 457–73. London, Cornell University Press.

- French, A. (1956) The economic background to Solon's reforms, *Classical Quarterly* 50, 11–25.
- Freud, S. (1960) *Totem and taboo*. London, Routledge and Kegan Paul. First published in German, 1913.
- (1985) *Civilization, society and religion, Group psychology, Civilization and its discontents, and other works*. Harmondsworth, Pelican. First published in German, between 1908 and 1930.
- Freytag, B. von G.L. (1974) Ein spätgeometrisches Frauengrab vom Kerameikos, *Athenische Mitteilungen* 89, 1–25.
- Fried, M.H. (1967) *The evolution of political society*. New York, Random House.
- Friedrich, P. (1966) Proto-Indo-European kinship, *Ethnology* 5, 1–36.
- Furumark, A. (1972) *Mycenaean pottery I: analysis and classification*. Stockholm, Skrifter utgivna i svenska institutet i Athen. First published 1941.
- Fustel de Coulanges, N.D. (1980) *The ancient city: a study on the religion, laws and institutions of Greece and Rome*. Baltimore and London, John Hopkins University Press. First published in French, 1864.
- Gartringen, H. von (1909) *Inscriptiones Graecae XII: Inscriptiones insularum maris Aegaei propter Delum. Fasciculus V: inscriptiones Cycladum*. Berlin, Georg Reimer.
- Gallant, T.W. (1982) Agricultural systems, land tenure and the reforms of Solon, *Annual of the British School at Athens* 77, 111–24.
- Galloway, P. (1976) Cluster analysis using fragmentary data, *Computer Applications in Archaeology* 1976, 41–7.
- Garlan, Y. (1980) Le travail libre en Grèce ancienne, in P.D.A. Garnsey (ed.), *Non-slave labour in the Greco-Roman world*, 6–22. Cambridge, PCPS supp. vol. 6.
- (1982) *Les esclaves en Grèce ancienne*. Paris, Maspéro.
- Garland, R.S.J. (1982) Geras thanonton: an investigation into the claims of the Homeric dead, *Bulletin of the Institute of Classical Studies* 29, 69–80.
- (1985) *The Greek way of death*. London, Duckworth.
- Garnsey, P.D.A., and Morris, I.M., forthcoming. Risk and the polis: the evolution of institutionalised responses to scarcity in the Greek city-state, in P.L.J. Halstead and J. O'Shea (eds.), *Cultural responses to uncertainty*. Cambridge, University Press.
- Gawantka, W. (1985) *Die sogenannte Polis*. Stuttgart, Franz Steiner Verlag.
- Gennep, A. van (1960) *The rites of passage*. London, Routledge and Kegan Paul. First published in French, 1909.
- Giddens, A. (1984) *The constitution of society. Outline of the theory of structuration*. Oxford, Polity Press.
- GitTINGS, C. (1984) *Death, burial and the individual in early modern England*. London, Croom Helm.
- Glazier, J. (1984) Mbeere ancestors and the domestication of death, *Man* n.s. 19, 133–48.
- Glötz, G. (1929) *The Greek city and its institutions*. London, Kegan Paul, Trench, Trubner and Co.
- Gluckman, M. (1937) Mortuary customs and the belief in survival after death among the South-Eastern Bantu, *Bantu Studies* 11, 117–36.
- Godelier, M. (1975) Modes of production, kinship, and demographic structures, in M. Bloch (ed.), *Marxist analyses and social anthropology*, 3–27. London, Tavistock.
- (1977) Politics as 'infrastructure': an anthropologist's thoughts on the example of classical Greece and the notions of relations of production and economic determination, in J. Friedman and M.J. Rowlands (eds.), *The evolution of social systems*, 13–28. London, Duckworth.
- Goldstein, L. (1981) One-dimensional archaeology and multi-dimensional people: spatial organization and mortuary analysis, in R. Chapman, I. Kinnes and K. Randsborg (eds.), *The archaeology of death*, 53–69. Cambridge, University Press.

- Gomme, A.W. (1927) The Athenian hoplite force in 431, *Classical Quarterly* 21, 142–50.
 (1933) *The population of Athens in the fifth and fourth centuries BC*. Oxford, University Press.
 (1956) *A historical commentary on Thucydides* volume 2. Oxford, Clarendon Press.
 (1959) The population of Athens again, *Journal of Hellenic Studies* 79, 61–8.
- Goodenough, W.H. (1965) Rethinking 'status' and 'role': toward a general model of the cultural organization of social relationships, in M. Banton (ed.), *The relevance of models for social anthropology*, 1–24. London, Tavistock.
 (1968) Componential analysis, *International encyclopedia of the social sciences* vol.3, 186–92. New York, Macmillan and the Free Press.
 (1970) *Description and comparison in cultural anthropology*. Cambridge, University Press.
- Goody, J.R. (1959) Death and social control among the LoDagaa, *Man* 59, 134–8.
 (1962) *Death, property and the ancestors*. London, Tavistock.
 (1975) Death and the interpretation of culture, in D. Stannard (ed.), *Death in America*, 1–8. Pittsburgh, University of Philadelphia Press.
 (1976) *Production and reproduction*. Cambridge, University Press.
 (1977) Mémoire et apprentissage dans les sociétés avec et sans écriture: la transmission du Bagre, *L'Homme* 17, 29–52.
- Graef, B., and Langlotz, E. (1925) *Die antiken Vasen von der Akropolis zu Athen*, vol.1. Berlin, de Gruyter.
- Graham, A.J. (1982) The colonial expansion of Greece, in J. Boardman and N.G.L. Hammond (eds.), *Cambridge ancient history* III:3, 83–162. 2nd edition, Cambridge, University Press.
- Greenhalgh, P.A.L. (1972) Patriotism in the Homeric world, *Historia* 21, 528–37.
 (1973) *Early Greek warfare*. Cambridge, University Press.
- Griffeth, R., and Thomas, C.G. (1981) Five city-state cultures compared, in R. Griffeth and C.G. Thomas (eds.), *The city-state in five cultures*, 181–207. Santa Barbara and Oxford, ABC-Clio.
- Griffin, J. (1980) *Homer on life and death*. Oxford, University Press.
- Gschntzer, F. (1976) *Studien zur griechischen Terminologie der Sklaverei* vol. 2. Wiesbaden, Franz Steiner Verlag. Forschungen zur antiken Sklaverei Band VII.
- Haas, J. (1981) Class conflict and the state in the New World, in G.D. Jones and R.R. Kautz (eds.), *The transition to statehood in the New World*, 80–102. Cambridge, University Press.
 (1982) *The evolution of the prehistoric state*. New York, Columbia University Press.
- Hachmann, R. (1963) Review of Kübler 1954 in *Göttinger Gelehrte Anzeiger* 215, 47–63.
- Hadzisteliou-Price, T. (1973) Hero-cult and Homer, *Historia* 22, 129–42.
 (1979) Hero-cult in the 'Age of Homer' and earlier, in G.W. Bowersock, W. Burkert and M.C.J. Putnam (eds.), *Arktouros: Hellenic studies presented to Bernard M.W. Knox*, 219–28. Berlin and New York, de Gruyter.
- Hägg, R. (1974) *Die Gräber der Argolis I: Lage und Form der Gräber*. Uppsala, Boreas 4.1.
 (1978) Protogeometric and Geometric finds from the Levendis sector, 1970–72, in I. Hägg and R. Hägg (eds.), *Asine II.1*, 83–107. Uppsala, Boreas 4.2.
 (1982) Zur Stadtwerdung des dorischen Argos, in *Paläst und Hütte. Beiträge zum Bauen und Wohnen in Altertum*, 297–307. Mainz, Philipp von Zabern.
 (1983) Burial customs and social differentiation in 8th-century Argos, in R. Hägg (ed.), *The Greek renaissance of the eighth century BC*, 27–31. Stockholm, Skrifter utgivna i svenska institutet i Athen.
 (ed.) (1983) *The Greek renaissance of the eighth century BC*. Stockholm, Skrifter utgivna i svenska institutet i Athen.

- Hall, E.R. (1914) Excavations in Eastern Crete, Vrokastro, *University of Pennsylvania, the Museum Anthropological Publications* III:3, 79–185.
- Halstead, P.L.J. (1981) From determinism to uncertainty: social storage and the rise of the Minoan palace, in A. Sheridan and G. Bailey (eds.), *Economic archaeology*, 187–213. Oxford, British Archaeological Reports, International Series 96.
- Hammel, E. (ed.) (1965) Formal semantic analysis, *American Anthropologist* 67, part 2.
- Hanfmann, G.M.A. (1963) The iron age pottery of Tarsus, in H. Goldman (ed.), *Excavations at Gözlü Kule, Tarsus III: The Iron Age*, 18–332. Princeton, University Press.
- Hansen, M.H. (1981) The number of Athenian hoplites in 431, *Symbolae Osloenses* 56, 19–32.
- (1985) The history of the Athenian constitution, *Classical Philology* 80, 51–69.
- (1986) *Demography and democracy: the number of Athenian citizens in the fourth century BC*. Copenhagen, Systime.
- Haspels, C.H.E. (1936) *Attic black-figured lekythoi*. Paris, de Boccard.
- Hassan, F. (1973) On mechanisms of population growth during the Neolithic, *Current Anthropology* 14, 525–42.
- Hawkes, C.F.C. (1954) Archaeological theory and method: some suggestions from the Old World, *American Anthropologist* 56, 155–68.
- Hayden, B.J. (1983) New plans of the Early Iron Age settlement of Vrokastro, *Hesperia* 52, 367–87.
- Hertz, R. (1960) *Death and the right hand*. Aberdeen, Cohen and West. First published in French, 1907.
- Heurtley, W.A. and Skeat, T.C. (1930/1) The tholos tombs of Marmariāne, *Annual of the British School at Athens* 31, 1–55.
- Hexter, J.H. (1972) Fernand Braudel and the monde braudellien, *Journal of Modern History* 44, 480–539.
- Hignett, C. (1952) *A history of the Athenian constitution to the end of the fifth century BC*. Oxford, Clarendon Press.
- Hinrichs, E. (1955) Totenkultbilder der attischen Frühzeit, *Annales Universitatis Saraviensis* 50, 124–57.
- Hinton, J. (1967) *Dying*. Harmondsworth, Penguin.
- Hobsbawm, E.J. (1959) *Primitive rebels*. New York, Norton.
- (1971) Class consciousness in history, in I. Meszaros (ed.), *Aspects of history and class consciousness*, 5–22. London, Routledge and Kegan Paul.
- Hodder, I.R. (1978) The spatial structure of material ‘cultures’: a review of some of the evidence, in I.R. Hodder (ed.), *The spatial organisation of culture*, 93–111. London, Duckworth.
- (1979) Economic and social stress and material culture, *American Antiquity* 44, 446–54.
- (1982a) *Symbols in action. Ethnoarchaeological studies of material culture*. Cambridge, University Press.
- (1982b) *The present past: an introduction to anthropology for archaeologists*. London, Batsford.
- (1982c) Theoretical archaeology: a reactionary view, in I.R. Hodder (ed.), *Symbolic and structural archaeology*, 1–16. Cambridge, University Press.
- (1984) Burials, houses, women and men in the European Neolithic, in D. Miller and C. Tilley (eds.), *Ideology, power and prehistory*, 51–68. Cambridge, University Press.
- (1985) Postprocessual archaeology, in M.B. Schiffer (ed.), *Advances in archaeological method and theory* vol.8, 1–26. New York, Academic Press.
- Hodson, F.R. (1977) Quantifying Hallstatt: some initial results, *American Antiquity* 42, 394–412.
- Hollingsworth, T.J. (1969) *Historical demography*. London, Hodder and Stoughton. Reprinted Cambridge, University Press (1976).

- Holy, L., and Stuchlik, M. (1981) The structure of folk models, in L. Holy and M. Stuchlik (eds.), *The structure of folk models*, 1–34. London, Academic Press. ASA monographs 20.
- Hood, M.S.F. (1960) Archaeology in Greece, 1959/60, *Archaeological Reports for 1959–60*, 3–26.
- (1961) Archaeology in Greece, 1960–1, *Archaeological Reports for 1960/61*, 3–35.
- Hood, M.S.F., and Coldstream, J.N. (1968) A late Minoan tomb at Ag. Ioannis near Knossos, *Annual of the British School at Athens* 63, 205–18.
- Hood, M.S.F., and Smyth, D. (1981) *Archaeological survey of the Knossos area*. London, Thames and Hudson. British School at Athens supp. vol. 12.
- Hopkins, M.K. (1978) *Conquerors and slaves*. Cambridge, University Press.
- (1983) *Death and renewal*. Cambridge, University Press.
- Humphreys, S.C. (1978) *Anthropology and the Greeks*. London, Routledge and Kegan Paul.
- Huntington, R., and Metcalf, P. (1979) *Celebrations of death: the anthropology of mortuary ritual*. Cambridge, University Press.
- Iakovides, S. (1970) *Perati; to nekrotapheion*. Athens, Vivliothiki tis en Athinais arkhaiologikis etaireias no. 67. 3 volumes.
- (1979) The chronology of LH IIIC, *American Journal of Archaeology* 83, 454–62.
- Iggers, G.G. (1984) *New directions in European historiography*. Revised edition, Middletown, Conn., Wesleyan University Press.
- Jacoby, F. (1949) *Atthis*. Oxford, Clarendon Press.
- Janko, R. (1982) *Homer, Hesiod and the hymns*. Cambridge, University Press.
- Jeffery, L.H. (1961) *The local scripts of Archaic Greece*. Oxford, Clarendon Press.
- (1962) The inscribed gravestones of Archaic Attica, *Annual of the British School at Athens* 57, 115–53.
- Johnson, C. (1984) Who is Aristotle's citizen?, *Phronesis* 29, 73–90.
- Jones, G.D., and Kautz, R.R. (1981) Issues in the study of New World state formation, in G.D. Jones and R.R. Kautz (eds.), *The transition to statehood in the New World*, 3–34. Cambridge, University Press.
- Judeich, W. (1931) *Topographie von Athen*. 2nd edition, Munich, C.H. Beck'sche Verlag.
- Kagan, D. (1963) The enfranchisement of aliens by Cleisthenes, *Historia* 12, 41–46.
- Kallipolitis, V.G. (1963) Anaskaphai taphon Anagyroundos, *Arkhaiologikon Deltion* 18:1, 115–32 (published 1964).
- (1965) Arkhaiotites kai mnimeia Attikis kai nison, *Arkhaiologikon Deltion* 20:2, 110–17 (published 1967).
- Kammen, M. (ed.) (1980) *The past before us. Contemporary historical writing in the United States*. London, Cornell University Press.
- Karagiorga-Stathakopoulou, T. (1978) 3e ephoreia proistorikon kai klasikon arkhaiotiton, *Arkhaiologikon Deltion* 33:2, 10–42 (published 1985).
- Karusos, C. (1961) *Aristodikos*. Stuttgart, W. Kohlhammer Verlag.
- Kavvadias, P., and Kawerau, G. (1906) *Die Ausgrabungen der Akropolis/I anaskaphi tis Akropoleos*. Athens, Vivliothiki tis en Athinais arkhaiologikis etaireias.
- Keesing, R.M. (1972) The new ethnography and the new linguistics, *Southwestern Journal of Anthropology* 28, 219–32.
- Kilian, K. (1978) Ausgrabungen in Tiryns 1976, *Archäologischer Anzeiger*, 449–70.
- (1979) Ausgrabungen in Tiryns 1977, *Archäologischer Anzeiger*, 379–411.
- (1982) Ausgrabungen in Tiryns 1980, *Archäologischer Anzeiger*, 393–430.
- (1983) Ausgrabungen in Tiryns 1981, *Archäologischer Anzeiger*, 277–328.
- Kinch, F. (1914) *Fouilles de Vroulia (Rhodes)*. Berlin, Georg Reimer.
- Kirk, G.S. (1985) *The Iliad: a commentary*. Vol.1. Cambridge, University Press.

- Knigge, U. (1976) *Kerameikos IX: Der Südhügel*. Berlin, de Gruyter.
 (1980) Der Rundbau am Eridanos, *Kerameikos XII: Rundbauten*, 57–98. Berlin, de Gruyter.
 (1984) Kerameikos. Tätigkeitsbericht 1982, *Archäologischer Anzeiger*, 27–35.
- Kondoleon, N. (1971) Anaskaphai Naxou, *Praktika*, 172–80.
- Königs, W. (1980) Ein archaischer Rundbau, *Kerameikos XII: Rundbauten*, 1–56. Berlin, de Gruyter.
- Kopytoff, I. (1982) Slavery, *Annual Review of Anthropology* 11, 207–30.
 (1986) The cultural biography of things: commoditization as process, in A. Appadurai (ed.), *The social life of things*, 64–91. Cambridge, University Press.
- Kourouniotes, K. (1911) Ex Attikis: A'. Anaskaphai Palaiou Phalirou, *Arkhaiologikis Ephemeris*, 246–51.
- Kraiker, W. (1939) Die Nekropole nördlich des Eridanos, in W. Kraiker and K. Kübler, *Kerameikos I*, 1–177. Berlin, de Gruyter.
- Krause, C. (1972) Eretria IV. Das Westtor. Berne, Editions Francke.
 (1982) Zur stadtebaulichen Entwicklung Eretrias, *Antike Kunst* 25, 137–44.
- Krause, G. (1975) *Untersuchungen zu den ältesten Nekropolen am Eridanos in Athen*. Hamburg, Beiträge für Archäologie III.
- Kritzas, C. (1973) Argos, *Arkhaiologikon Deltion* 28:2, 122–35 (published 1977).
- Kroeber, A.L. (1927) Disposal of the dead, *American Anthropologist* 29, 308–15.
- Krystalli-Votsi, K. (1976) Nomos Korinthias, *Arkhaiologikon Deltion* 31:2, 64–55 (published 1984).
- Kübler, K. (1943) *Kerameikos IV.1*. Berlin, de Gruyter.
 (1950) *Altattische Malerei*. Tübingen, Verlag Ernst Wasmuth.
 (1954) *Kerameikos V.1*. Berlin, de Gruyter.
 (1959) *Kerameikos VI.1*. Berlin, de Gruyter.
 (1964) Zu der Nekropole des 10.–8. Jahrhunderts in Kerameikos, *Archäologischer Anzeiger*, 145–79.
 (1970) *Kerameikos VI.2*. Berlin, de Gruyter.
 (1976) *Kerameikos VII.1*. Berlin, de Gruyter.
- Kuper, H. (1947) *An African aristocracy*. Oxford, University Press.
- Lacey, W.K. (1980) *The family in Classical Greece*. Reprint, Auckland, University Press. First published 1968.
- La Fontaine, J.S. (1978) Introduction, in J.S. La Fontaine (ed.), *Sex and age as principles of social differentiation*, 1–20. London, Academic Press. ASA monograph 17.
- Lambert, S.D. (1982) A Thucydidean scholium on the Lelantine war, *Journal of Hellenic Studies* 102, 216–20.
- Lambrinoudakis, V. (1974) Anaskaphi Naxou, *Praktika*, 189–93.
 (1980) Anaskaphi Naxou, *Praktika*, 259–62.
 (1983) Les ateliers de céramique géométrique et orientalisante de Naxos: perspectives pour l'analyse archéométrique, in *Les Cyclades: matériaux pour une étude de géographie historique*, 165–75. Paris, CNRS.
- Lanciani, R. (1888) *Ancient Rome in the light of recent discoveries*. London, Macmillan.
- Landsberger, H.A. (1974) Peasant unrest: themes and variations, in H.A. Landsberger (ed.), *Rural protest: peasant movements and social change*, 1–64. London, Macmillan.
- Lang, M.L. (1984) *Herodotean narrative and discourse*. Cambridge, Mass., Harvard University Press.
- Langdon, M. (1976) *A sanctuary of Zeus on Mt. Hymettos*. Princeton, American School of Classical Studies (*Hesperia* supp. vol. 16).
- Latacz, J. (1977) *Kampfparänese, Kampfdarstellung und Kampfwirklichkeit in der Ilias, bei Kallinos und Tyrtaios*. Munich, Zetemata 66.

- Lauter, H. (1982) Zwei horos-inschriften bei Vari, *Archäologischer Anzeiger*, 299–315.
- (1985a) *Lathuresa. Beiträge zur Architektur und Siedlungsgeschichte in spätgeometrischer Zeit*. Mainz, Verlag Philipp von Zabern.
- (1985b) *Der Kultplatz auf dem Turkovuni*. Berlin, Gebr. Mann Verlag, Mitteilungen des deutschen archäologischen Instituts, Beiheft 12.
- Lauter-Bufe, H. and Lauter, H. (1975) Die vorthemistokleische Stadtmauer Athens nach philologischen und archäologischen Quellen, *Archäologischer Anzeiger*, 1–9.
- Lawrence, P. (1964) Five grave groups from the Corinthia, *Hesperia* 35, 89–107.
- Layton, R. (1972) Settlement and community, in P.J. Ucko, G.W. Dimbleby and R. Tringham (eds.), *Man, settlement and urbanism*, 377–81. London, Duckworth.
- Leach, E.R. (1954) *Political systems of highland Burma*. London, Tavistock. Reprinted 1977.
- (1976) *Culture and communication: the logic by which symbols are connected*. Cambridge, University Press.
- (1979) Discussion, in B.C. Burnham and J. Kingsbury (eds.), *Space, hierarchy and society*, 119–24. Oxford, British Archaeological Reports, International Series 59.
- Lebrun, F. (1971) *Les hommes et la mort en Anjou au XVIIe et XVIIIe siècles*. Paris, Mouton, Civilisations et sociétés 25.
- Leimbach, R. (1980) Review of Latacz 1977, in *Gnomon* 52, 418–25.
- Lévêque, P. (1978) Formes des contradictions et voies de développement à Athènes de Solon à Clisthène, *Historia* 27, 522–49.
- (1979) Les dépendants du type hilotique; les hectémores, in E.C. Welskopf (ed.), *Terre et paysans dépendants dans les sociétés antiques*, 114–19. Paris, CNRS.
- Lévêque, P. and Vidal-Naquet, P. (1964) *Clisthène l'athénien*. Paris, Annales littéraires de l'université de Besançon 65.
- Littman, R.J. (1979) Kinship in Athens, *Ancient Society* 10, 5–31.
- Llewelyn-Davies, M. (1978) Two contexts of solidarity among pastoral Maasai women, in P. Caplan and J.M. Bujra (eds.), *Women united, women divided*, 206–37. London, Tavistock.
- Lloyd, C. (1983) Greek urbanity and the polis, in R.T. Marchese (ed.), *Aspects of Graeco-Roman urbanism: essays on the Classical city*, 11–41. Oxford, British Archaeological Reports, International Series 188.
- Lloyd, G.E.R. (1962) Right and left in Greek philosophy, *Journal of Hellenic Studies* 82, 56–66.
- (1964) Hot and cold, wet and dry in Greek philosophy, *Journal of Hellenic Studies* 84, 92–106.
- (1966) *Polarity and analogy*. Cambridge, University Press.
- Lobel, E. and Page, D.L. (1955) *Poetarum Lesbiorum fragmenta*. Oxford, Clarendon Press.
- Lolling, H.G., Bohn, W., Fürtwangler, A. and Köhler, U. (1880) *Das Kuppelgrab bei Menidi*. Athens, Karl Wilberg.
- Loraux, N. (1986) *The invention of Athens. The funeral oration in the Classical city*. Cambridge, Mass., Harvard University Press. First published in French, 1981.
- Lord, A.B. (1960) *The singer of tales*. Cambridge, Mass., Harvard University Press.
- Lorimer, H. (1947) The hoplite phalanx, with special reference to the poems of Archilochus and Tyrtæus, *Annual of the British School at Athens* 42, 76–138.
- Lotze, D. (1959) *Metaxu eleutheron kai doulon. Studien zur Rechtsstellung unfreier Landbevölkerung in Griechenland bis zum 4. Jahrhundert*. Berlin, Akademie-Verlag.
- McCullagh, C.B. (1984) *Justifying historical descriptions*. Cambridge, University Press.
- McDonald, W.A., Coulson, W.D.E., and Rosser, J.J. (1983) *Excavations at Nichoria in South-West Greece III: Dark Age and Byzantine occupation*. Minneapolis, University of Minnesota Press.
- McDonald, W.A., and Rapp, G.R. (eds.) (1972) *The Minnesota Messenia expedition. Reconstructing a Bronze Age regional environment*. Minneapolis, University of Minnesota Press.

- Macfarlane, A. (1981) Death and the demographic transition: a note on English evidence on death, 1500–1700, in S.C. Humphreys and H. King (eds.), *Mortality and immortality*, 249–59. London, Academic Press.
- McManners, J. (1981a) Death and the French historians, in J. Whaley (ed.), *Mirrors of mortality*, 106–30. London, Europa Press.
- (1981b) *Death and the Enlightenment*. Oxford, University Press.
- Malinowski, B. (1954) *Magic, science and religion*. New York, Doubleday. First published 1925.
- Martin, R. (1977) *Historical explanation. Re-enactment and practical inference*. Ithaca and London, Cornell University Press.
- Marwick, A. (1970) *The nature of history*. London, Macmillan.
- Mastrokostas, E. (1963) Arkhaiotites kai mnimeia Thessalias, *Arkhaiologikon Deltion* 18:2, 132–48 (published 1965).
- Meggitt, M.J. (1965) *The lineage system of the Mae-Enga of New Guinea*. London, Oliver and Boyd.
- Meiggs, R. (1964) A note on the population of Athens, *Classical Review* 78, 2–3.
- Metzger, I. (1985) *Eretria VII. Das Thesmophoreion von Eretria. Funde und Befunde eines Heiligtums*. Berne, Francke Verlag.
- Miller, D. (1985) *Artefacts as categories: a study of ceramic variability in central India*. Cambridge, University Press.
- Miller, D., and Tilley, C. (1984a) Ideology, power and prehistory: introduction, in D. Miller and C. Tilley (eds.), *Ideology, power and prehistory*, 1–15. Cambridge, University Press.
- (1984b) Ideology, power and long-term change, in D. Miller and C. Tilley (eds.), *Ideology, power and prehistory*, 147–52. Cambridge, University Press.
- Miller, M. (1970) *The Sicilian colony dates*. Albany, N.Y., SUNY Press.
- Millett, P.C. (1984) Hesiod and his world, *Proceedings of the Cambridge Philological Society* 210, 84–115.
- Momigliano, A. (1977) *Essays in ancient and modern historiography*. Oxford, Blackwell.
- (1978) Source theory in Greek historiography, *History and Theory* 6, 1–28.
- Moore, H.L. (1986) *Space, text and gender. An anthropological study of the Marakwet of Kenya*. Cambridge, University Press.
- Morgan, C.H. (1937) Excavations at Corinth, 1936–37, *American Journal of Archaeology* 41, 539–52.
- Morris, I.M. (1985) *Burial and society at Athens, 1100–500 BC*. Ph.D. thesis, Cambridge University.
- (1986a) The use and abuse of Homer, *Classical Antiquity* 5, 81–138.
- (1986b) Gift and commodity in Archaic Greece, *Man* n.s. 21, 1–17.
- Morris, S.P. (1984) *The Black and White style: Athens and Aigina in the Orientalizing period*. New Haven, Yale University Press.
- Mossé, C. (1964) Classes sociales et régionalisme à Athènes au début du VI^e siècle, *Antiquité Classique* 33, 401–13.
- (1979) Les dépendants paysans dans le monde grec à l'époque archaïque et classique, in E.C. Welskopf (ed.), *Terre et paysans dépendants dans les sociétés antiques*, 85–97. Paris, CNRS.
- (1982) Quelques réflexions sur 'la conditions négative' de l'apparition d'une société esclavagiste, et sur l'ambiguïté du statut servile, *Opus* 1, 53–6.
- Mountjoy, P. (1984) The bronze graves from Athens, a case for a LH IIIC date, *Opuscula Atheniensa* 15, 135–46.
- (1986) *Mycenaean decorated pottery: a guide to identification*. Goteborg, Studies in Mediterranean Archaeology 73.
- Mulgan, R.G. (1977) *Aristotle's political theory*. Oxford, Clarendon Press.

- Murray, O. (1980) *Early Greece*. London, Hassocks & Glasgow.
- Musgrave, J. (1980) The human remains from the cemeteries, in M.R. Popham, L.H. Sackett and P.G. Themelis, *Lefkandi I*, 447–59. London, Thames and Hudson. Annual of the British School at Athens Supplementary Volume 11.
- Mylonas, G. (1957) *O protoattikos amphorevs tis Elefsinos*. Athens, Vivliothiki tis en Athinais arkhaiologikis etaireias no. 39.
- (1961) *Eleusis and the Eleusinian mysteries*. Princeton, University Press.
- (1975) *To dytikon nekrotapheion tis Elefsinos*. Athens, Vivliothiki tis en Athinais arkhaiologikis etaireias no. 81. 3 volumes.
- (ed.) (1984) *To Ergon tis Arkhaiologikis Etaireias*.
- Naroll, R. (1956) A preliminary index of social development, *American Anthropologist* 58, 687–715.
- Nicolai, W. (1983) Rezeptionssteuerung in der Ilias, *Philologus* 127, 1–12.
- Nock, A.D. (1972) Cremation and burial in the Roman empire, in *Essays on religion and the ancient world* vol.1, 277–307. Oxford, University Press (ed. by Z. Stewart). First published in *Harvard Theological Review* 25 (1932), 321–59.
- Nussbaum, G. (1960) Labour and status in the *Works and Days*, *Classical Quarterly* 10, 213–20.
- Ohly, D. (1953) *Griechische Goldbleche des 8. Jahrhunderts v. Chr.* Berlin, Verlag Gebr. Mann.
- Oliver, J.H. (1960) Reforms of Cleisthenes, *Historia* 9, 503–7.
- Osborne, R.G. (1985) *Demos: the discovery of Classical Attika*. Cambridge, University Press.
- O'Shea, J. (1984) *Mortuary variability*. New York, Academic Press.
- Ostwald, M. (1969) *Nomos and the beginnings of the Athenian democracy*. Oxford, Clarendon Press.
- Pader, E.-J. (1982) *Symbolism, social relations and the interpretation of mortuary remains*. Oxford, British Archaeological Reports, International Series 110.
- Page, D.L. (1959) *History and the Homeric Iliad*. Berkeley, University of California Press.
- (1962) *Poetae Melici Graecae*. Oxford, Clarendon Press.
- Palgi, P. and Abramovich, A. (1984) Death: a cross-cultural perspective, *Annual Review of Anthropology* 13, 385–417.
- Papadakis, N. and Rutkowski, B. (1985) New research at Skales cave near Praisos, *Annual of the British School at Athens* 80, 129–37.
- Papaspyridi-Karouzou, S. (1963) *Ta angeia tou Anagyroundos*. Athens, Vivliothiki tis en Athinais arkhaiologikis etaireias no. 48.
- Parker, R. (1983) *Miasma. Pollution and purification in early Greek religion*. Oxford, University Press.
- Parker Pearson, M. (1982) Mortuary practices, society and ideology: an ethnoarchaeological case study, in I.R. Hodder (ed.), *Symbolic and structural archaeology*, 99–113. Cambridge, University Press.
- (1984a) Economic and ideological change: cyclical growth in the pre-state societies of Jutland, in D. Miller and C. Tilley (eds.), *Ideology, power and prehistory*, 69–92. Cambridge, University Press.
- (1984b) Social change, ideology and the archaeological record, in M. Spriggs (ed.), *Marxist perspectives in archaeology*, 59–71. Cambridge, University Press.
- Parry, M. (1971) *The making of Homeric verse*. Oxford, University Press (ed. A. Parry).
- Patrik, L. (1985) Is there an archaeological record?, in M. Schiffer (ed.), *Advances in archaeological method and theory* vol.8, 27–62. New York, Academic Press.
- Patterson, C. (1981) *Pericles' citizenship law of 451/0 BC*. New York, Arno Press.
- Patterson, O. (1982) *Slavery and social death*. Cambridge, Mass., Harvard University Press.

- Payne, H. (1931) *Necrocorinthia*. Oxford, Clarendon Press.
- (1933) *Protokorinthische Vasenmalerei*. Berlin, Verlag Heinrich Keller.
- Peebles, C., and Kus, S. (1977) Some archaeological correlates of ranked society, *American Antiquity* 42, 421–48.
- Pelekides, S. (1916) Anaskaphi Phalirou, *Arkhaiologikon Deltion* (2nd series) 2, 13–64.
- Pellegrini, G. (1903) Tombe greche arcaiche e tomba greco-sannitica a tholos della necropoli di Cuma, *Monumenti Antichi* 13, 201–294.
- Pendlebury, J.D.S. (1937/8) Excavations in the plain of Lasithi III: Karphi, *Annual of the British School at Athens* 38, 57–145.
- Philios, D. (1889) Anaskaphi arkhaion taphon en Elefsini, *Ephemeris Arkhaiologikis*, 171–87.
- Philippson, A. (1952) *Die griechischen Landschaften*. Frankfurt-am-Main, Vittorio Klostermann.
- Polgar, S. (1972) Population history and population policies from an anthropological perspective, *Current Anthropology* 13, 203–11.
- de Polignac, F. (1984) *La naissance de la cité grecque*. Paris, Editions de la découverte.
- Pomeroy, S. (1976) *Goddesses, whores, wives and slaves*. London, Hale.
- Popham, M.R., and Sackett, L.H. (1968) *Excavations at Lefkandi, Euboea, 1964–66*. London, Thames and Hudson. British School at Athens Supplementary Paper.
- Popham, M.R., Sackett, L.H., and Themelis, P.G. (1980) *Lefkandi I. The Iron Age settlement and cemeteries*. London, Thames and Hudson. British School at Athens Supplementary Volume 11.
- Popham, M.R., Touloupa, E., and Sackett, L.H. (1982a) Further excavations of the Toumba cemetery at Lefkandi, 1981, *Annual of the British School at Athens* 77, 213–48.
- (1982b) The hero of Lefkandi, *Antiquity* 56, 169–74.
- Potter, T.W. (1979) *The changing landscape of South Etruria*. London, Elek Press.
- Poulsen, F. (1905) *Die Dipylongräber und die Dipylonvasen*. Leipzig, Teubner.
- Price, B.J. (1977) Shifts of production and organization: a cluster interaction model, *Current Anthropology* 18, 209–34.
- (1978) Secondary state formation: a model, in R. Cohen and E.R. Service (eds.), *Origins of the state: the anthropology of political evolution*, 161–86. Philadelphia, Institute for the Study of Human Issues.
- Pritchett, W.K. (1985) *The Greek state at war* part IV. Berkeley, University of California Press.
- Qviller, B. (1981) The dynamics of the Homeric society, *Symbolae Osloenses* 56, 109–55.
- Radcliffe-Brown, A.R. (1922) *The Andaman islanders*. Cambridge, University Press.
- Raepsaet, G. (1973) A propos de l'utilisation de statistiques en démographie grecque: le nombre d'enfants par famille, *Antiquité Classique* 42, 536–43.
- Raubitschek, A.E. (1949) *Dedications from the Athenian Akropolis. A catalogue of the inscriptions of the sixth and fifth centuries BC*. Cambridge, Mass., Harvard University Press.
- Redfield, J.M. (1975) *Nature and culture in the Iliad*. Chicago, University Press.
- Redfield, R. (1956) *Peasant society and culture*. Chicago, University Press.
- Renfrew, A.C. (1972) *The emergence of civilization*. London, Methuen.
- (1974) Beyond a subsistence economy, the evolution of social organization in prehistoric Europe, in C.B. Moore (ed.), *Reconstructing complex societies*, 69–95. Supplement to the *Bulletin of the American Schools of Oriental Research* 20.
- (1976) Megaliths, territories and populations, in S.J. de Laet (ed.), *Acculturation and continuity in Atlantic Europe*, 198–220. Bruges, De Tempel (Dissertationes Archaeologicae Gandenses).
- (1977) Space, time and polity, in J. Friedman and M.J. Rowlands (eds.), *The evolution of social systems*, 89–114. London, Duckworth.

- (1980) The great tradition vs. the great divide: archaeology as anthropology?, *American Journal of Archaeology* 84, 287–98.
- (1985) *The archaeology of cult: the sanctuary at Phylakopi*. London, Thames and Hudson (British School at Athens supplementary vol.18).
- Renfrew, A.C., and Cherry, J.F. (eds.) (1986) *Peer polity interaction and the development of sociocultural complexity*. Cambridge, University Press.
- Renfrew, A.C., Rowlands, M.J., and Segraves, B. (eds.) (1982) *Theory and explanation in archaeology*. London, Academic Press.
- Rhodes, P.J. (1981) *A commentary on the Aristotelian Athenaion Politeia*. Oxford, Clarendon Press.
- Richards, J.D., and Ryan, N.S. (1985) *Data processing in archaeology*. Cambridge, University Press.
- Richter, G.M.A. (1961) *The Archaic gravestones of Attica*. London, Phaidon.
- (1968) *Korai, Archaic Greek maidens*. London, Phaidon.
- (1970) *Kouroi, Archaic Greek youths*. 3rd edition, London, Phaidon.
- Ridgway, D. (1984) *L'alba della Magna Grecia*. Rome, Longanesi a.C.
- Roussel, D. (1976) *Tribu et cité: études sur les groupes sociaux dans les cités grecques aux époques archaïque et classique*. Paris, Annales littéraires de l'université de Besançon 193 (Centre de recherches d'histoire ancienne vol. 23).
- Rowlands, M.J. (1971) The archaeological interpretation of prehistoric metalworking, *World Archaeology* 3, 210–24.
- (1973) Modes of exchange and the incentives for trade, with reference to late European prehistory, in A.C. Renfrew (ed.), *The explanation of culture change*, 589–600. London, Duckworth.
- (1980) Kinship, alliance and exchange in the European Bronze Age, in J. Barrett and R. Bradley (eds.), *The British Later Bronze Age*, 15–55. Oxford, British Archaeological Reports 83, part 1.
- Rubensohn, O. (1917) Die prähistorische und frühgeschichtlichen Funde auf dem Burghügel von Paros, *Athenische Mitteilungen* 42, 1–98.
- Runciman, W.G. (1982) Origins of states: the case of Archaic Greece, *Comparative Studies in Society and History* 24, 351–77.
- (1983) *A treatise on social theory. Vol.1: the methodology of social theory*. Cambridge, University Press.
- Runnels, C.N. (1982) Stanford University investigations in Greece, 1981, *Old World Archaeology Newsletter* 6:1, 16–17.
- Russell, J.C. (1958) Late ancient and medieval population, *Transactions of the American Philosophical Society* 48:3.
- Rutter, J.J. (1981) A plea for the abandonment of the term 'Submycenaean', *Temple University Aegean Symposium* 3, 58–65.
- (1983) Some thoughts on the analysis of ceramic data generated by site surveys, in R. Keller and D. Rupp, *Archaeological survey in the Mediterranean area*, 137–42. Oxford, British Archaeological Reports, International Series 155.
- Saari, H. (1984) *Re-enactment: a study in R.G. Collingwood's philosophy of history*. Abo, Abo Akademi (Acta Academiae Aboensis Ser. A vol. 63, no. 2).
- Sackett, L.H. (1976) A new figured krater from Knossos, *Annual of the British School at Athens* 71, 117–29.
- Sackett, L.H., Hankey, V., Howell, R.J., Jacobsen, T.W., and Popham, M.R. (1966) Pre-historic Euboea: contributions towards a survey, *Annual of the British School at Athens* 61, 33–112.
- Sahlins, M.D. (1957) Differentiation by adaptation in Polynesian societies, *Journal of the Polynesian Society* 66, 291–300.

- (1960) Evolution: specific and general, in M.D. Sahlins and E.R. Service (eds.), *Evolution and culture*, 12–44. Ann Arbor, University of Michigan Press.
- (1985) *Islands of history*. Chicago, University Press.
- Ste Croix, G.E.M. de (1981) *The class struggle in the ancient Greek world*. London, Duckworth.
- Sakellariou, M. (1979) Les hectémores, in E.C. Welskopf (ed.), *Terre et paysans dépendants dans les sociétés antiques*, 99–113. Paris, CNRS.
- Salmon, J. (1977) Political hoplites?, *Journal of Hellenic Studies* 97, 84–101.
- (1984) *Wealthy Corinth*. Oxford, University Press.
- Salmon, M.H. (1982) *Philosophy and archaeology*. London, Academic Press.
- Sattenspiel, L., and Harpending, H. (1983) Stable populations and skeletal age, *American Antiquity* 48, 489–98.
- Saxe, A.A. (1970) Social dimensions of mortuary practices. Ph.D. thesis, Michigan University.
- Schepers, G. (1975) Some aspects of source theory in Greek historiography, *Ancient Society* 6, 247–74.
- Schilardi, D.U. (1975a) Anaskaphi para ta Makra Teikhi kai i oinokhoi tou Tavrou, *Arkhaiologiki Ephemeris*, 66–149.
- (1975b) Paros, report II: the 1973 campaign, *Journal of Field Archaeology* 2, 83–96.
- (1976) Anaskaphi Parou, *Praktika*, 287–94.
- (1978) Anaskaphi stin Paro, *Praktika*, 195–210.
- (1983) The decline of the Geometric settlement of Koukounaries at Paros, in R. Hägg (ed.), *The Greek renaissance of the eighth century BC*, 173–83. Stockholm, Skrifter utgivna i svenska institutet i Athen.
- (1984) Representations of free-standing sarcophagi on Attic, white-ground lekythoi, in *Ancient Greek and related pottery*, 264–70. Amsterdam, Proceedings of the International Vase Symposium (Allard Pierson Series vol. 5).
- (forthcoming) Anaskaphi stin Paro, to appear in *Praktika* for 1984.
- Schnapp-Gourbeillon, A. (1982) Les funéraires de Patrocle, in G. Gnoli and J.-P. Vernant (eds.), *La mort, les morts, dans les sociétés anciennes*, 77–88. Cambridge, University Press.
- Scranton, R.L. (1942) *Greek walls*. Cambridge, Mass., American School of Classical Studies.
- Service, E.R. (1975) *Origins of the state and civilization: the process of cultural evolution*. New York, Norton.
- Shaw, J.W. (1982) Excavations at Kommos (Crete) during 1981, *Hesperia* 51, 164–95.
- (1984) Excavations at Kommos (Crete) during 1982–1983, *Hesperia* 53, 251–87.
- Shay, T. (1985) Differentiated treatment of deviancy at death as revealed in anthropological and archaeological material, *Journal of Anthropological Archaeology* 4, 221–41.
- Shennan, S.J. (1978) Archaeological 'cultures': an empirical investigation, in I.R. Hodder (ed.), *The spatial organisation of culture*, 113–39. London, Duckworth.
- Shephard, J. (1979) The social identity of the individual in isolated barrows and barrow cemeteries in Anglo-Saxon England, in B.C. Burnham and J. Kingsbury (eds.), *Space, hierarchy and society*, 47–79. Oxford, British Archaeological Reports, International Series 59.
- Simms, R. (1983) Eumolpos and the wars of Athens, *Greek, Roman and Byzantine Studies* 24, 197–208.
- Skocpol, T. (1979) *States and social revolutions: a comparative analysis of France, Russia and China*. Cambridge, University Press.
- Smith, C.A. (1976a) Analyzing regional social systems, in C.A. Smith (ed.), *Regional analysis II: social systems*, 3–20. New York, Academic Press.
- (1976b) Exchange systems and the spatial distribution of elites: the organization of stratification in agrarian societies, in C.A. Smith (ed.), *Regional analysis II: social systems*, 309–74. New York, Academic Press.

- Smithson, E.L. (1968) The grave of a rich Athenian lady, c.850 BC, *Hesperia* 37, 77–136.
 (1974) A Geometric cemetery on the Areopagus: 1897, 1932, 1947, *Hesperia* 43, 147–78.
 (1977) 'Submycenaean' and LH IIIC domestic deposits in Athens, *American Journal of Archaeology* 81, 78–79.
 (1982) The prehistoric Klepsydra: some notes, *Hesperia* supp. vol.20, 141–54.
- Sneath, P.H.A. (1982) Classification and identification with incomplete data, *Computer Applications in Archaeology* 1982, 182–7.
- Snodgrass, A.M. (1964) *Early Greek armour and weapons*. Edinburgh, University Press.
 (1965) The hoplite reform and history, *Journal of Hellenic Studies* 85, 110–22.
 (1971) *The Dark Age of Greece*. Edinburgh, University Press.
 (1973) Bronze 'phalara' – a review, *Hamburger Beiträge zur Archäologie* 3, 41–50.
 (1977) *Archaeology and the rise of the Greek state*. Cambridge, University Press.
 (1980) *Archaic Greece: the age of experiment*. London, Dent.
 (1982a) Les origines du culte des héros dans la Grèce antique, in G. Gnoli and J.-P. Vernant (eds.), *La mort, les morts, dans les sociétés anciennes*, 107–19. Cambridge, University Press.
 (1982b) *Narration and allusion in Archaic Greek art*. Oxford, Leopard Press.
 (1983) Two demographic notes, in R. Hägg (ed.), *The Greek renaissance of the eighth century BC*, 167–71. Stockholm, Skrifter utgivna i svenska institutet i Athen.
 (1985) The new archaeology and the Classical archaeologist, *American Journal of Archaeology* 89, 31–7.
 (1986) Interaction by design: the Greek city-state, in A.C. Renfrew and J.F. Cherry (eds.), *Peer polity interaction and the development of socio-cultural complexity*, 47–58. Cambridge, University Press.
- Sokal, R.R., and Sneath, P.H.A. (1963) *Principles of numerical taxonomy*. London, W.H. Freeman and Co.
- South, S. (1977) *Method and theory in historical archaeology*. New York, Academic Press.
- Sperling, J.W. (1973) *Thera and Therasia*. Athens Center of Ekistics, vol.22.
- Stannard, D. (1977) *The Puritan way of death*. Oxford, University Press.
- Starr, C.G. (1977) *Economic and social growth of early Greece, 800–500 BC*. Oxford, University Press.
- Stavropoulos, P. (1965) Athinai-Attiki B'. Anaskaphikai erevnai kai tykhaia evrimata, *Arkhaiologikon Deltion* 20:2, 44–109 (published 1967).
- Stillwell, A. (1948) *Corinth XV.1: the Potters' Quarter*. Cambridge, Mass., American School of Classical Studies.
- Stone, L. (1981) *The past and the present*. London, Routledge and Kegan Paul.
- Stupperich, R. (1977) Staatsbegräbnis und Privatgrabmal im klassischen Athen, Ph.D. thesis, Westfälischen Wilhelms-Universität, Münster.
- Styrenius, C.-G. (1967) *Submycenaean studies*. Stockholm, Skrifter utgivna i svenska institutet i Athen.
- Symeonoglou, S. (1985) *The topography of Thebes*. Princeton, University Press.
- Tainter, J.A. (1975) Social inference and mortuary practices: an experiment in numerical classification, *World Archaeology* 7, 1–15.
 (1977) Modeling change in prehistoric social systems, in L.R. Binford (ed.), *For theory building in archaeology*, 327–51. New York, Academic Press.
 (1978) Mortuary practices and the study of prehistoric social systems, in M. Schiffer (ed.), *Advances in archaeological method and theory*, vol. 1, 105–41. New York, Academic Press.
 (1981) Reply to a critique of some recent North American mortuary studies, *American Antiquity* 46, 416–20.
- Themelis, P.G. (1971) *Brauron. A guide to the museum*. Athens, Apollo Editions.

- (1973/4) Anavyssos, *Arkhaiologikon Deltion* 29:2, 108–10 (published 1979).
- (1976) *Frühgriechische Grabbauten*. Mainz, Verlag Philipp von Zabern.
- (1979) Anaskaphi Eretrias, *Praktika*, 40–55.
- (1982) Anaskaphi stin Eretria, *Praktika*, 163–80.
- (1983) An eighth-century goldsmith's workshop at Eretria, in R. Hägg (ed.), *The Greek renaissance of the eighth century BC*, 157–65. Stockholm, Skrifter utgivna i svenska institutet i Athen.
- Theochares, D.R. (1956) Anaskaphai en Iolko, *Praktika*, 119–30.
- (1960) Anaskaphai en Iolko, *Praktika*, 49–59.
- (1961) Anaskaphai Iolkou, *Praktika*, 45–54.
- Thompson, E.P. (1978a) Eighteenth-century English society: class struggle without class?, *Social History* 3, 133–65.
- (1978b) *The poverty of theory and other essays*. London, Merlin Press.
- (1980) *The making of the English working class*. Revised edition, Harmondsworth, Pelican. First published by Victor Gollancz, 1963.
- Thompson, J.B. (1984) *Studies in the theory of ideology*. Oxford, Polity Press.
- Tölle-Kastenbein, R. (1983) Bemerkungen zur absoluten Chronologie spätarchaïsche und frühklassischer Denkmäler Athens, *Archäologischer Anzeiger*, 573–84.
- Travlos, I. (1960) *Poleodomiki exelixis ton Athinon*. Athens, Konstantinidi and Mikhala.
- (1983) I Athina kai i Elefsina ston 8o kai 7o p.Ch. aiona, *Annuario della scuola archeologica di Atene* 61, 323–38.
- Trigger, B.G. (1978) *Time and traditions. Essays in archaeological interpretation*. Edinburgh, University Press.
- (1985) *Archaeology as historical science*. Varanasi, Banaras Hindu University, Monograph of the Department of Ancient Indian History, Culture and Archaeology no.14.
- Tsakos, K. (1969a) Samos, *Arkhaiologikon Deltion* 24:3, 376–90 (published 1970).
- (1969b) Samos – Dytiki nekropolis, *Athens Annals of Archaeology* 2, 202–5.
- Ucko, P.J. (1969) Ethnography and the archaeological interpretation of mortuary remains, *World Archaeology* 1, 262–90.
- Ure, P.N. (1910) Excavations at Rhitsona in Boeotia, *Journal of Hellenic Studies* 30, 336–56.
- (1927) *Sixth and fifth century pottery from excavations made at Rhitsona*. Oxford, University Press.
- (1934) *Aryballoi and figurines from Rhitsona in Boeotia*. Cambridge, University Press.
- Vanderpool, E. (1969) Three prize vases, *Arkhaiologikon Deltion* 24:1, 1–5 (published 1971).
- Vansina, J. (1985) *Oral tradition as history*. Madison, University of Wisconsin Press.
- Verdelis, N.M. (1966) Anaskaphi Varis, *Arkhaiologikon Deltion* 21:2, 95–7.
- Verdelis, N.M., and Alexandri, O. (1961/2) Agii Theodori Korinthias, *Arkhaiologikon Deltion* 17:2, 52–4 (published 1963).
- Verdelis, N.M., and Davaras, K. (1966) Anaskaphi Anavyssou, *Arkhaiologikon Deltion* 21:2, 97–8.
- Vernant, J.-P. (1980) *Myth and society in ancient Greece*. Brighton, Harvester Press. First published in French, 1974.
- (1981) Sacrificial and alimentary codes in Hesiod's myth of Prometheus, in R.L. Gordon (ed.), *Myth, religion and society*, 57–79. Cambridge, University Press.
- (1982) La belle mort et le cadavre outrage, in G. Gnoli and J.-P. Vernant (eds.), *La mort, les morts, dans les sociétés anciennes*, 45–76. Cambridge, University Press.
- (1983) *Myth and thought among the Greeks*. London, Routledge and Kegan Paul. First published in French, 1965.
- Vidal-Naquet, P. (1981) Recipes for Greek adolescence, in R. Gordon (ed.), *Myth, religion and society*, 163–85. Cambridge, University Press.

- Vierneisel, K. (1964) Die Grabung in der Nekropole 1962, *Archäologischer Anzeiger*, 420–67.
- Vokotopoulou, I. (1982) I Epiros ston 8o kai 7o aiona p.Ch., *Annuario della scuola archeologica di Atene* 60, 77–100.
- Vovelle, M. (1976) Les attitudes devant la mort: problèmes de methode, approches et lectures différentes, *Annales, économies, sociétés, civilisations* 31, 120–32.
- Wait, G.A. (1985) *Ritual and religion in Iron Age Britain*. Oxford, British Archaeological Reports 149. 2 volumes.
- Walker, L. (1984) Population and behaviour: the deposition of human remains, in B.W. Cunliffe (ed.), *Danebury: an Iron Age hillfort in Hampshire*, 442–63. London, CBA Research Report no. 52.
- Walter, O. (1940) Archäologische Funde in Griechenland vom Frühjahr 1939 bis Frühjahr 1940, *Archäologischer Anzeiger*, 121–308.
- Warren, P.M. (1983) Knossos: Stratigraphical Museum excavations, 1978–82. Part II, *Archaeological Reports for 1982/3*, 64–87.
- (1985) Knossos: Stratigraphical Museum excavations, 1978–82. Part III, *Archaeological Reports for 1984/5*, 124–49.
- Waters, K.H. (1985) *Herodotos the historian*. London, Croom Helm.
- Watson, J.L. (1980) Slavery as an institution: open and closed systems, in J.L. Watson (ed.), *African and Asian systems of slavery*, 1–15. Oxford, Blackwell.
- Wees, H. van (1986) Leaders of men? An analysis of the Homeric heroes' neglected leadership, *Classical Quarterly* 36, 285–303.
- Weinberg, S. (1974) KTA from Corinth, *Hesperia* 43, 522–34.
- Weiss, K.M. (1973) *Demographic models for anthropology*. Memoirs of the Society for American Archaeology 27.
- Wells, B. (1983) *Asine II.4.2–3. The Protogeometric period*. Stockholm, Skrifter utgivna i svenska institutet i Athen.
- Wells, C. (1960) A study of cremation, *Antiquity* 34, 29–37.
- Welter, G. (1938a) Aeginetica XIII–XXIV, *Archäologischer Anzeiger*, 480–540.
- (1938b) *Aigina*. Berlin, Verlag Gebr. Mann.
- West, M.L. (1971) *Iambi et elegi Graeci* vol. 1. Oxford, Clarendon Press.
- (1972) *Iambi et elegi Graeci* vol. 2. Oxford, Clarendon Press.
- (1978) *Hesiod's Works and Days*. Oxford, Clarendon Press.
- Whaley, J. (1981) Symbolism for the survivors: the disposal of the dead in Hamburg in the late seventeenth and eighteenth centuries, in J. Whaley (ed.), *Mirrors of mortality*, 80–105. London, Europa.
- Whimster, R. (1981) *Burial practices in Iron Age Britain*. Oxford, British Archaeological Reports 90. 2 volumes.
- Whitehead, D. (1981) The serfs of Sicyon, *Liverpool Classical Monthly* 6, 37–41.
- Whitelaw, T.M. (1983) The settlement at Fournou Korifi Myrtos and aspects of Early Minoan social organization, in O. Krzyszkowska and L. Nixon (eds.), *Minoan society*, 323–45. Bristol, Classical Press.
- Whitley, J. (n.d.) Going out in style: a Geometric way of death, unpublished paper delivered to the Cambridge Research Seminar in Archaeology, January 1983.
- Wickert-Micknat, G. (1982) *Die Frau*. Göttingen, *Archeologica Homerica* III.R.
- (1983) *Unfreiheit im Zeitalter der homerischen Epen*. Wiesbaden, Franz Steiner Verlag. Forschungen zur antiken Sklaverei Band XVI.
- Wide, S. (1910) Gräberfunde aus Salamis, *Athenische Mitteilungen* 35, 17–36.
- Will, Ed. (1957) Aux origines de la régime foncier grec, *Revue des études anciennes* 59, 5–50.
- Will, Ern. (1965) Hésiode: crise agraire? ou recul de l'aristocratie?, *Revue des études grecques* 88, 522–46.
- Willemsen, F. (1963) Archaische Grabmalbasen aus der Athener Stadtmauer, *Athenische Mitteilungen* 78, 104–53.

- Williams, C.K. (1982) The early urbanization of Corinth, *Annuario della scuola archeologica di Atene* 60, 9–21.
- Williams, C.K., MacIntosh, J., and Fisher, J.E. (1974) Excavations at Corinth, 1973, *Hesperia* 43, 1–76.
- Wolf, E.R. (1957) Closed corporate peasant communities in Mesoamerica and Central Java, *Southwestern Journal of Anthropology* 13, 7–12.
- (1966a) *Peasants*. Englewood Cliffs, N.J., Prentice-Hall Inc.
- (1966b) Kinship, friendship and patron–client relationships in complex societies, in M. Banton (ed.), *The social anthropology of complex societies*, 1–22. London, Tavistock.
- Woodburn, J. (1982) Social dimensions of death in four African hunting and gathering societies, in M. Bloch and J. Parry (eds.), *Death and the regeneration of life*, 187–210. Cambridge, University Press.
- Wrede, W. (1934) *Attika*. Athens, Deutsches archäologisches Institut.
- Wright, H.T. (1977) Recent research on the origin of the state, *Annual Review of Anthropology* 6, 379–97.
- Wright, H.T., and Johnson, G.A. (1975) Population, exchange, and early state formation in Southwestern Iran, *American Anthropologist* 77, 267–89.
- Yavis, C. (1949) *Greek altars*. St Louis, University Studies.
- Young, R.L. (1939) *Late Geometric graves and a seventh-century well*. Princeton, *Hesperia* supp. vol. 2.
- (1942) Graves from the Phaleron cemetery, *American Journal of Archaeology* 46, 26–57.
- (1949) An Early Geometric grave near the Athenian Agora, *Hesperia* 18, 275–97.
- (1951) Sepulturae intra urbem, *Hesperia* 20, 187–252.
- (1964) The Geometric period, in C. Blegen, H. Palmer and R.S. Young, *Corinth XIII: the North Cemetery*, 13–49. Princeton, American School of Classical Studies.
- Zapheiropoulos, N. (1960) Paros, *Arkhaiologikon Deltion* 16:2, 245 (published 1962).
- (1963) Paros, *Arkhaiologikon Deltion* 18:3, 273–4 (published 1965).
- (1981) Anaskaphi Selladas Theras, *Praktika*, 329–30.
- (1982) Anaskaphi Selladas Theras, *Praktika*, 267–71.
- Zapheiroulou, P. (1969) Donousa, *Arkhaiologikon Deltion* 24:3, 390–3.
- Zschietzschmann, W. (1928) Die Darstellung der Prothesis in der griechischen Kunst, *Athenische Mitteilungen* 53, 17–47.

SITE INDEX

- Academy, 20, 86
Aegina, 108, 207
Ag. Andreas (Siphnos), 109
Ag. Eleousa Pyriou (Thebes), 188
Akraiphnion, 188
Al Mina, 11
Anavyssos, 20, 65, 68, 79–80, 81–2, 82–5, 86, 93, 103, 106, 109, 122, 124, 127–8, 152
Argos
Agora, 8, 163, 184
cemeteries, 172, 180, 181, 182, 183–8
Heraion, 191
Asine, 146, 162–3, 172, 189
Athens
Acropolis, 77, 163, 191
Ag. Markou St, 124
Agora, 8, 20, 22, 57, 63–8, 74, 75, 77, 79, 81, 82, 86, 120, 122, 126, 133–4, 152, 160, 163
Amphiktyonos St, 120
Areopagus, 65, 67, 75, 79, 124
Aristonikou St, 133
Aristotelous St, 133
Athinias St, 133
Burgon grave, 13–14
Dēmosion Sēma, 106, 107
Dimitrakopoulou St, 63
Diocharian Gate cemetery, 87
Dipylon cemetery, *see* Peiraios St
Drakou St, 59, 63, 76, 120
Erechtheiou St, 63, 76, 78, 79, 120, 122, 126
Erysichthonos St, 82, 143
Kavalotti St, 20, 81, 124, 126
Kerameikos: Ag. Triada cemetery, 72–4, 81, 82, 85, 86, 151; Bau Z, 61, 85; chronology, 15; mound G, 81, 87, 131–2, 153; north bank, 82, 85; Plattenbau, 62, 82, 152, 153; Pompeion, 63, 74; Rundbau, 61, 129–30, 153; South Mound, 87, 153; stratigraphy, 14, 15
Kriezi St, 20, 60, 67, 76, 78, 79, 85, 120, 124, 133, 143
Kynosarges, 67, 124, 143
Nilios St, 82, 143
Nymphaeum, 65, 67, 75, 124
Olympiclion, 60, 67, 77, 85, 120, 133
Parthenonos St, 124
Peiraios St, 20, 67, 81, 87, 126, 133, 143, 152
Sapphous St, 67, 85, 133
Stoa of Eumenes grave, 124
Theophilopoulou St, 124
Vassilissis Sophias Ave/Irodou Attikou St, 20, 78, 122
Brauron, 108, 160
Chalcis, 160, 165–6, 210
Chania (Mycenae), 173
Chondrovolakes, 108
Corinth
agora, 8, 160, 161, 188
Anaploga well, 17
fortification wall, 192
Potters' Quarter, 163
Cumae, 188
Cyrene, 25, 160
Delos, 192
Delphi, 192
Dodona, 192
Donoussa, 107, 146
Draphi, 86, 87
Dreros, 7
Eleusis, 20, 22, 59, 68, 79, 81, 85, 86, 122, 124, 137, 138, 152, 191, 195
Emborio (Chios), 164
Epidauros, 187
Eretria
agora, 8
cemeteries, 187
fortification wall, 192
temple, 191
Examilia, 186
Fortetsa (Knossos), 50, 179–80, 188
Grotta (Naxos), 108, 164, 187, 194
Halieis, 161
Hama, 11
Iolkos, 179
Ioulis, 51
Kalapodi, 189
Kalyvia Kouvara, 86, 152
Karphi, 146, 179, 189
Kea, 172
Khaniale Teke (Knossos), 188
Knossos, 106, 146, 161, 162, 179, 180, 183, 185, 188
Kommos, 189
Koropi, 143
Koukounaries (Paros), 108, 146, 147, 163, 164, 172, 187, 189, 190, 194
Lathouresa, 68, 97–8, 146, 157, 163–4
Lefkandi, 50, 106, 107–8, 146, 160, 165, 173, 180, 182
Liopesi (Attica), 87, 137
Mallia, 7
Marathon, 68, 79, 81, 109, 122, 124, 195
Marmariani, 108
Massilia, 105
Megara, 25, 207
Megara Hyblaea, 7, 14
Megiddo, 13
Melos, 161, 187
Menidi, 79, 122, 143
Merenda, 20, 68, 79, 81, 82, 85, 86, 109, 122, 127, 143, 152, 195
Mesad Hashvyahu, 13
Miletus, 166
Mount Hymettus, 163, 191
Mount Parnes, 106
Mycenae, 13, 146, 172
Mytilene, 3, 207

- Nafplion, 106
 Naxos, 187
 Nea Ionia, 20, 79, 122
 Nichoria, 146, 189

 Olympia, 192
 Olynthus, 151

 Palaia Kokkinia, 81
 Paros, 161, 164, 188
 Perachora, 163, 191
 Perati, 77, 146
 Petreza, 86, 152
 Phaistos, 146
 Phaleron, 22, 86, 106, 137, 152
 Phylakopi, 172
 Pitheculas, 11, 166, 188
 Plaka (Athens), 67
 Prinias, 188
 Pylos, 172

 Rhexion, 160
 Rhitsona, 188
 Rhodes, 167

 Salamis (Attica), 18, 59, 76–8, 207
 Salamis (Cyprus), 45
 Samaria, 13
 Samos, 148, 188, 191
 Selinus, 14
 Sicyon, 185
 Skales cave (Praisos), 108
 Smyrna, 13, 161, 164
 Solomos, 186
 Sounion, 87, 137, 191
 Sparta, 50, 174, 179, 203, 205, 207
 Spata, 86, 143, 152

 Tanagra, 188
 Tarentum, 14
 Tarsus, 17
 Tavros, 86, 152
 Tell-abu-Hawam, 13
 Tenea, 160
 Thasos, 164
 Thebes, 48, 186, 188

 Thera, 160, 161, 169, 185, 188
 Thorikos, 20, 22, 63, 69, 70–1, 86, 93, 108, 115, 127, 134, 152–3, 154, 163, 195
 Tiryns, 13, 106, 146, 172, 180
 Tocra, 180
 Trachones, 20, 127, 152
 Tsikalario, 187

 Vari, 20, 22, 68, 86, 103, 106, 109, 136, 137, 152, 153
 Varkiza, 68
 Velanideza, 22, 86, 103, 134–6, 152, 153
 Votanikos, 86, 134, 153, 154
 Vourva, 22, 86, 103, 136, 152
 Vrokastro, 108, 146
 Vroulia, 85, 164

 Xombourgo, 109

 Zagora, 108, 109, 160, 187
 Zancle, 160

GENERAL INDEX

- Abercrombie, N., Hill, S., and Turner, B.S., 41
- Achaea, 172
- Achilles, 46–7, 138
- Aeschines, 53
- Aeschylus, 49
- Agamemnon, 53
- Agariste, 165
- agathoi, 33, 157, 173, 179, 182, 183, 194, 202–10
as a class, 171
definition, 9, 94–6
and land, 175–7
and war, 196–8
- age
at death, 57–8, 74, 76–7
structures, 57–62, 72, 76–7
- Aglaureion inscription, 67
- Agora, 7–8, 193
- Ahlberg, G., 200
- Alcaeus, 3, 5, 53
- Alcmaeonids, 48
- Alexiou, M., 52
- Amphidamas, 47
- Amyx, D., and Lawrence, P., 17
- Anacharsis, 208
- analogy, 212
- ancestors, 182, 183
- Andreiomenou, A., 187
- Andromache, 46
- Angel, J.L., 81
- Annales* school, 214
- Antiochos of Syracuse, 14
- Apollonius Rhodius, 105
- archaeology
new/processual, 9, 29, 213–16
post-processual/contextual, 9, 215–16
- Archilochus, 48, 53, 160, 165
- Argos
burial, 172, 180, 181, 182, 183–5
population, 146, 161
- Aries, P., 35–6, 42, 186
- Aristophanes, 160
- Aristotle
Constitution of Athens, 24–6, 53–4, 205–6, 208–10
- History of Animals*, 62
- Metaphysics*, 193
- Politics*, 3–5, 7, 24, 44, 186, 193, 196–7, 201, 205, 207, 208, 209, 216
- Artemis, 160
- Asad, T., 40–1
- Assyria, 11, 17, 203
- Auden, W.H., 217
- Austin, M.M., and Vidal-Naquet, P., 217
- authority, 33–4
- Baba, K., 209
- Bacchiads, 186
- Baka, 29
- Bali, 93–4
- 'Barbarian ware', 23
- basileis*, 94, 172, 194, 197, 201, 203
- Beaker network, 15–16
- Beazley, J.D., 10
- Beloch, J., 99
- Benson, J.L., 14
- Bérard, C., 193
- Beringer, W., 178
- Berlin A 34, Painter of, 18
- Binford, L.R., 37–40, 213–15
- Bloch, Maurice, 33–6, 39, 40–1, 47
- Boardman, J., 17
- Bochlau, J., 148
- Boeotia, 188, 210
- Bohen, B., 183
- Bourriot, F., 62, 68
- Bradley, R., 9–10, 217
- Brann, E., 67
- Braudel, F., 214–5
- Braun, D., 138
- British Iron Age, 94, 105
- Burton grave, 13–14
- burial
analysis of archaeological evidence, 36–43, 46–50, 93–4, 211–12
Argive, 172, 180, 181, 182, 183–5
child, 18–22, 58–62, 63, 93, 104, 179–80, 184
complexity, 37–8, 40, 138–9
- Corinthian, 185–6
- Cretan, 172, 179–81
- customs in Attica, 18–22
- denial of, 105
- exclusion from formal, 93–109, 206
- French, 107
- Hellenistic, 90
- heroic, 184, 187, 193–4
- horse, 48, 130
- intra-mural, 62–9, 179–82, 184, 185, 193
- and kinship, 52–4, 87–93
- multiple, 85, 172, 179, 180, 184–5
- Mycenaean, 63, 172–3
- retrieval rates, 101–4
- Roman, 90, 105, 107
- royal, 124, 180, 184, (*see also* Peisistratos)
- theories of, 29–43
- variations in Attica, 195
- warrior, 148, 151
- burying groups
calculation, 74–5
- Callinus, 48
- Camp, J. McK., 72, 92, 96, 156, 158–62, 165, 166
- Carr, E.H., 215
- Cartledge, P.A., 203
- Cassola, F., 205–6
- Catling, H.W., 107
- cavalry, 196
- Cavanagh, W.G., 75, 78, 79, 138
- cemeteries, 9, 52–4, 62–9, 72–4, 75–6, 92–3, 179–82, 184, 185
- chamber tombs, 172
- Champion, T., *et al.*, 204
- chariots, 199
- Charitonides, S., 65
- Childe, V.G., 42
- China, ancient, 210
- chronology, 10–18, 117, 156, 162–7
- Cimon, 48–9, 152
- Cipolla, C.M., 57
- circumscription, 166

- citizenship, Greek, 3–6, 175,
 186–7, 193, 202, 210,
 216–17
 Clarke, D.L., 15–16, 115–16,
 158, 163, 166
 class analysis, 171, 176–7,
 201–2, 203
 Cleisthenes, 26, 208–10
 Cleomenes, 26
 cluster interaction, 2
 coinage, 25
 Colchis, 105
 Coldstream, J.N., 10, 14–15,
 50, 107, 122, 143, 160,
 183, 194, 195
 Collingwood, R.G., 214–16
 colonisation, 11, 14, 156, 166,
 188
 communal consumption, 189,
 193
 complementary filiation, 90
 componential analysis, 111–15
Constitution of Athens, see
 Aristotle
 Cook, J.M., 10
 Cook, R.M., 14
 Corinth
 burial, 185–6
 chronology, 17, 163
 fortification, 192
 population, 162
 corporate community, 5, 52–4
 Courbin, P., 183
 cremation, 18–22, 46, 60–1,
 153–4
 Crete
 burial, 172, 179–81
 Dark Age cult, 189
 serfdom, 205, 207
 culture groups, 194–5
 Cylon, 25, 207
 Cypselus, 186

 Damasias, 36
 Davies, J.K., 25
 Debord, P., 178
 debt bondage, 26, 201, 205–7
 definitive segmentation, 90
 Deilaki, E., 183–4
 demography, 36, 57–62, 74–5,
 87–93, 99–101
Dēmosion Sēma, 106, 107
 Demosthenes, 53, 54, 90, 91,
 100
 Desborough, V.R., 10
 descent groups, 8, 52–4, 87–93,
 180, 182, 188
 Detienne, M., 91, 196, 201
 diet, 23, 201
 Diodorus Siculus, 99
 Diomedes, 53
 Dipylon Master, 13
 discourse of the proof, 156

dmoēs, 178–9, 201
 dominant ideology thesis, 41
 Donlan, W., 91
 Dorian invasion, 23, 173, 187
douloi, 174, 178, 187
 Dracon, 25
 drought, 160–2
 Dunbabin, T.J., 166
 Durkheim, E., 33

 ecology, 90
 Eetion, 46
 Effenterre, H. van, 6, 7
 egalitarian society, see social
 complexity
 Egypt, 23
 Ehrenberg, V., 99
 elites
 definition, 94–6
 spatial distribution, 157
 Elpenor, 46
 emotional response to death,
 29–30, 138
 empathy, 215–16
 energy expenditure, 46, 97
 entropy, 144–5
 Ephorus, 99
epimortē, 207
 Epirus, 159
 Eretria
 burials, 187
 fortification walls, 192
 pottery and settlement,
 165–6
 Eridanos river, 63
erithos, 178
 ethnos, 6, 8, 204, 205
eupatridai, 94, 206
 Euripides, 49, 53, 181
 Evans-Pritchard, E.E., 34
 evolution, social, 1, 7
 exhumation, 93–4
 exploitation, 174–7, 201, 204
 exposure of the dead, 105–6

 family
 consciousness, 185
 nuclear, 90–1
 see also *oikos*
 Fenik, B., 199
 Festus, 105
 feudalism, 175
 Finley, M.I., 174–5, 177, 183,
 196, 204, 206
 Firth, R., 90
 Flannery, K.V., 2
 Fletcher, F., 100
 force, 2, 3
 formal analysis, see
 componential analysis
 Forrest, W.G., 91, 183
 fortification walls, 192
 Francis, E.D., and Vickers,
 M.J., 14
 Frankenstein, S., and
 Rowlands, M.J., 203
 Freeman, E.A., 215
 Fried, M.H., 93, 182
 Friedman, J., 203
 funerals
 Hellenistic, 90
 Homeric, 46–7
 iconography, 50
 !Kung, 34
 modern western, 34–6
 Nuer, 34
 orations, 197
 Roman, 32, 90, 154
 sumptuary laws, 50–2
 Fustel de Coulanges, N.D., 53,
 181–2, 207

 Gallant, T.W., 205
 Garland, Y., 178, 205
 Garland, R., 44
 Gawantka, W., 10–11
 gemmation, 90
 Gennep, A. van, 30, 31, 33, 35,
 52
 Gernet, J., 210
 Giddens, A., 39
 gift giving, 203, 212
 Gini's coefficient, 29, 141–3,
 181, 182, 188
 Gluckman, M., 29–30, 37
 gods, 23, 189–92
 Goldstein, L., 52–4, 144, 175
 Gomme, A.W., 99–100
 Goodenough, W.H., 37, 109
 Goody, J.R., 33, 34, 37, 39, 45
 Göttingen school, 215
 grave goods
 abandonment after 700 BC,
 21, 126, 141, 142–3,
 183–4, 188, 190
 distribution, 140–4, 147–9,
 180–2, 185–6
 Homeric, 46, 47
 missing data, 114–15
 ninth-century increase,
 180–1
 relative visibility, 101–4, 212
 grave lengths, 58–9, 60
 grave markers, 46, 50, 122,
 129, 130–2, 151–4, 184,
 206
 great divide, 10
 Greenhalgh, P.A.L., 199, 200
 Griffin, J., 199
 Gschnitzer, F., 178
gunaika kiētēn, 178
gymnētes, 187

 Haas, J., 201
 Hadzisteliou-Price, T., 194
 Hägg, R., 183

- Hallstatt, 111, 203
 Hamburg, 107
 Hector, 46, 199
hektēmoroi, 205–7
 helots, 174, 203
 Herodotus, 23–6, 48, 50, 99, 151, 152, 165, 187, 197, 208–10
 heroic
 ambiguity, 200–1
 art, 194
 burial, 184, 187, 193–4
 cult at Mycenaean tombs, 194
 poetry, *see* Homer
 Hertz, R., 30–3, 37
 Hesiod, 24, 44, 47–8, 91, 94, 140, 157, 177–9, 188, 192–3, 197, 201, 206
 Hignett, C., 209
 hierarchy of inference, 212
 Hipparchus, 26
 Hippias, 26, 208
 historians, 212–16
 Hobsbawm, E.J., 177, 202
 Hodder, I.R., 38, 39, 41, 42, 195, 209
 Hodson, F.R., 111, 141
 Homer, 23–4, 44–6, 53, 90–1, 93, 94, 138, 140, 148, 157, 161–2, 177–9, 182, 192–3, 194, 196, 198–201
 Homeric Hymns, 165
 hoplite reform, 25, 195–201
 Horace, 105
 horse burial, 48, 130
 Humphreys, S.C., 90
 hunter-gatherers, 34

 Iberia, 158
 iconography, 50, 194, 195, 200
 ideal language, 111
 ideology, 40–2, 139, 173, 186, 209
 individualising consumption, 189, 190
 industrial revolution, 202
 inhumation, 18–22, 58–9
 inter-annual variability, 162
 Ionian
 islands, 172
 migration, 23
 Isaeus, 53
 Isagoras, 26
isēgoria, 205, 210
isonomia, 205, 210
 Italy, 158

 Jacoby, F., 24
 javelins, 199
 Jeanmaire, H., 42

 Kagan, D., 209
 kakoi, 94–6, 157, 171, 173, 175–7, 179, 196–8, 201, 202–10
 Kant, I., 215
 Karagiorga-Stathakopoulou, T., 136
 Kavvadias, P., 59
 Keramo stele, 53
 Kilian, K., 106
 kinship and burial, 52–4, 87–93
kleos, 46, 48, 201
 Knigge, U., 129–30, 133
koinōnia, 3–5, 8
 korai and kouroi, *see* grave markers
 Kourouniotes, K., 86
 Kraiker, W., 63, 78, 77
 Krause, G., 18, 19, 76, 78, 119, 172
krēdemnon, 192
 Kroeber, A.L., 138
 Kübler, K., 62, 85, 122, 141, 152, 153
 !Kung, 34
 Kus, S., 97

 Laconia, 205
 Laertes, 47
 land tenure, 5, 52–4, 176
 Landsberger, H.A., 176
 Latacz, J., 198–200
 La Tène, 203
 Lauter, H., 97, 164
 laws, 25, 186
 funerary, 50–2
 Leach, E.R., 39, 40–1, 42, 140, 203
 legitimisation crises, 42, 203
 Leimbach, R., 199
 Lelantine war, 165–6
 levelling ideologies, 139, 147–51, 212
 Lévêque, P., 208
 Linear B, 90, 178
 literary sources, *see* orality; textual evidence
 Livy, 198
 Lord, A.B., 45
 Lorenz curves, 141–3, 181
 Lorimer, H., 196
 Lotze, D., 187
 Lycurgus
 of Athens, 26
 of Sparta, 207
 Lysias, 53

 Mac-Enga, 34
 Marxism, 203; *see also* class analysis
 Mbeere, 34
 Megacles, 26
mentalité, 186
mesoi, 197–8
 Messenia, 205
 metals
 as grave goods, 141–4, 148–9, 153
 in settlements, 150
 metics, 6, 209
 microspatial analysis, 116–17
 Miller, D., 16–17, 42
 Millett, P.C., 94, 157
 Miltiades, 208
 Minoan civilisation, 2, 6
 missing data, 111–15
 monomachy, *see* single combat
 monumental constructions, 189–91, 208
 Morris, S.P., 67
 mortality rates, 57–8, 61–2, 63, 74, 100
 Mossé, C., 206, 208
 mounds, *see* grave markers
 mourning, 29–32, 46–50, 138
 Murray, O., 42
 Musgrave, J., 106, 179
 Mycenaean civilisation, 2, 6, 45, 172, 204
 pottery, 11, 12, 17
 religion, 23, 189
 settlement sizes, 146

 Near East, 158; *see also* Assyria
 Nicolai, W., 194
 nominal data, 112–15
 non-burial, 46–7
 Nuba, 209
 Nuer, 34
 Nussbaum, G., 178

oikeu, 177–9
oikos, 90–3
 'Old Oligarch', 201
 oligarchy, 186
 Oliver, J.H., 209
 orality, 23–5, 45–6, 199
 organisation, social, 39, 42, 176–7, 217
 Osborne, R.G., 68, 100
 O'Shea, J., 29, 38, 116, 138
 Ostwald, M., 210
 outlying graves, 123, 125, 131
 overlapping stewardship, 175
 oversize graves, 116, 125, 152

 Pader, E.-J., 36–7, 39, 40, 41, 110, 212
 palaeodemography, 57–8
 Palaiologos, A., 81
 Pandora, 193
 Pareto, V., 95
 Parker Pearson, M., 40, 42
 Parry, M., 45
pa-si-re-u, 172
 pastoralism, 23
 Patroclus, 46–7, 49
 patron-client relationships, 91
 Patterson, C., 99–100
 Patterson, O., 174

- Payne, H., 14
 peasant society, 91, 146, 157, 173–7, 202–3
 Peebles, C.S., 97
 peer polity interaction, 2
 Peisistratos, 26, 68, 101, 208–9
 Pelekides, S., 86
 Penelope, 47
 periboloi, *see* grave markers
 Pericles, 32, 40, 49
perioikoi, 186–7
 phalanx, 25, 195–201
 Pheidon of Corinth, 186
 Philippson, K., 68
 Philistines, 11
 Philolaos, 186
 Pindar, 48
 Plato, 2, 5, 6, 44, 49, 53, 98, 156, 216
 plebeians, 198
 plot, grave, 72–4, 92–3
 pluralism, 203
 Plutarch, 24, 48, 49, 50, 54, 154, 160–1, 165, 176, 205, 206, 207, 208
 polarity, religious, 193
 Polignac, F. de, 189, 190, 191, 193–4, 210
politeia, 3
politeuma, 3
 politics, 2–3
Politics, *see* Aristotle
 pollution, 30, 32, 63, 192–3
 Pollux, 187, 207
 Polybius, 32
 Polycrates, 148
 Pomeroy, S., 57
 Popper, K., 213
 population
 Archaic and Classical Athens, 99–101
 eighth-century growth, 23, 72, 92, 156–9, 194, 203
 recovery through burials, 97–9
 settlement area and, 97, 100
 pottery
 Black Figure, 13–14, 18
 chronology, 10–18, 162–7
 culture groups, 194–5
 diagnostic, 162–7
 Geometric, 11–18, 50, 162–7, 194–5, 200
 Mycenaean, 11, 12, 17
 Protoattic, 14, 15, 16, 163–4
 Protocorinthian, 14, 17, 163
 Protogeometric B, 183
 Red Figure, 14, 18
 residual, 163
 Submycenaean, 11, 13, 17
 Transitional, 18
 Pritchett, W.K., 198–200
 process
 in archaeology, 9, 213–15
 class as, 171
 slavery as, 174
 ‘progressive disappearance’ of sites, 162
promachoi, 199
 Prometheus, 193
 proto-Indo-European kinship, 90
 psychoanalysis, 29–30
puticoli, 105, 107
 Pythagoreans, 193

 quantitative methods, 111–16
 Qviller, B., 203

 Radcliffe-Brown, A.R., 31, 57
 Ranke, L. von, 215
 ranking, 2, 93–6, 152, 182
 definition, 93
Ranking, resource and exchange, 215
 Redfield, J.M., 47
 regressive technique, 173
 relative deprivation, 203, 207
 relativism, 202, 215
 relief pithoi, 108
 religion, 23, 189–93
 religious specialists, 2
 Renfrew, A.C., 10, 36, 93, 194
 representational art, 194
 revolution
 French, Russian and Chinese, 202–3, 204
 social, 202–5, 207, 210
 Ridgway, D., 166
 rites of passage, 29–36, 40, 42, 105
 ritual ambiguity, 190–1, 194, 200–1, 211–12
 role theory, 37, 40, 110–11
 Rome
 funerals, 32, 90, 154
 slavery, 174
 social conflict, 95, 198
 Runciman, W.G., 2
 Russell, J.C., 100
 Russian poetry, 199
 Rutter, J.J., 158

 Sahlin, M.D., 1, 90–1
 Ste Croix, G.E.M. de, 175
 Sakellariou, M., 207
 Salmon, J., 186, 201
 sanctuaries, 23, 189–92
 Sappho, 48, 53
 Sarpedon, 47
 Saxe, A.A., 37, 40, 52–4, 112, 117, 144, 175
 Semonides, 48
 Sepeia, battle of, 186
 serfdom, 175, 181, 205–9
 settlement
 area and population, 97, 100
 and burial, 62–71
 Classical, 5
 Dark Age, 62–9, 146–7, 172, 183
 seventh-century, 161–7
 size and complexity, 145–7
 sex structure, 57
 single combat, 199–200
 Skocpol, T., 202–3, 210
 slavery
 African, 174, 178
 Greek, 173–9, 202, 203, 217
 Roman, 174
 Smithson, E.L., 62
 Snodgrass, A.M., 7, 8, 23, 72, 96, 143, 156, 158, 160, 183, 194, 197, 198, 200, 217
 social complexity, 37, 40, 138–9, 144–7
 social persona, 37, 40, 110–17, 137–9
 Solon, 24, 25–6, 48, 50, 205–8
 Sophilos, 18
 Sophocles, 49, 53
 spears, 199
 spheres of exchange, 149–50
 standard-of-living controversy, 201–2
 Starr, C.G., 2, 94, 183
 statuary, *see* grave markers
 status
 achieved/ascribed, 145–6
 relationship, 110
 Stesichorus, 48
stix, 198
 Stobaeus, 48
 Stone, L., 35
 Strabo, 160
 stratified society, 2, 182
 stress hypothesis, 42, 181–3
 structure
 age, 57–62, 72, 173, 179, 181–2, 187, 188
 agrarian, 203
 funerary, 111, 128, 137
 rank, 97
 sex, 57
 social, 32, 34, 38–42, 171, 176–7, 183, 186, 216–17
 Stupperich, R., 133
 style war, 42, 182
 Styrenius, C.-G., 120
Suidas, 44, 160
 sumptuary laws, *see* laws, funerary
 surface survey, 158
 symbolism, 139, 140, 211–12

 Tainter, J.A., 36, 111, 144
 taxes, 6, 174, 208
 temples, 189–92
 textual evidence, 23–4, 44–50
 Theagenes, 25
 Themelis, P.G., 108–9, 165, 166

- Themistocles Decree, 99
 Theognis, 44, 48, 53
 Theophrastus, 138
thē̄s, 178
 Thessaly, 179, 185, 205
 Thompson, E.P., 171, 177, 202, 214
 Thucydides, 5, 14, 24, 32, 40, 49, 99, 100, 106, 138, 208
 tombs, *see* grave markers
 tools, 150
 trade, 161–2
 Travlos, J., 100
 'tribalism', 8, 23
 truncated descent lines, 90–1
 tumuli, *see* grave markers
 Tydeus, 53
 tyrants, 25, 186, 188, 196, 200, 208
 Tyrtaeus, 48, 53, 151, 154, 199, 200
 unification of Attica, 195
 Ure, P.N., 188
 Urnfield Europe, 2
 Uzbek poetry, 199
 Valerius Maximus, 105
 variability scores,
 analyses, 119–37
 calculation, 112–15
 Varro, 105
 varying/unvarying attributes,
 115
 Venn diagrams, 112
 Verdelis, N.M., 97
 Vernant, J.-P., 47, 192, 196, 210
 visibility
 burials, 101–4
 surface pottery, 156–8
 votive offerings, 190
 Wait, G.A., 94
 warfare, 25, 165–6, 196–201, 204, 207
 warrior graves, 148
 Watson, J., 174
 Wees, H. van, 198
 Weever, J., 211
 Weiss, K.M., 57
 wells
 Athenian, 67, 160
 Corinthian, 160
 Whig interpretation of history,
 197
 Wickert-Micknat, G., 47, 178
 Wide, S., 59
 Will, Ed., 201
 Will, Ern., 179
 Woodburn, J., 34
 writing, 35, 194
 Xenophon, 44, 50, 53, 100, 105
 Young, R.L., 65, 68
 Zenobius, 48